

~~CURRENT~~ NOTES

Your Monitor on the World of Atari

Vol. 11, No. 5

June 1991

\$3.95

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- Desktop Calculators**
- Evolution of a Mailing List**
- MMUs and Magic**
- And a Relaxing Change:
*Hero's Quest***

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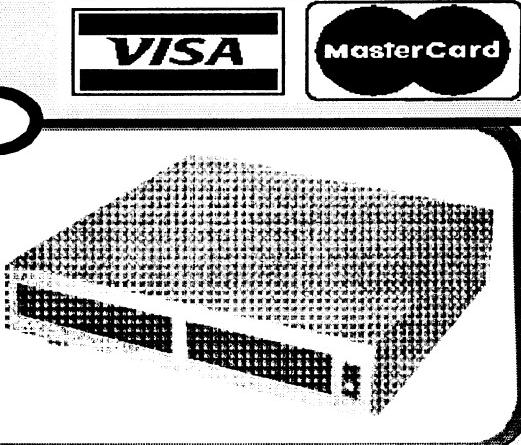
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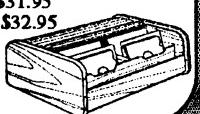
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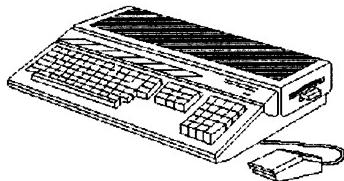
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TIME TO RENEW?

Look at your mailing label. If it has the expression 9106 on the first line, that means your subscription ends in 1991, month 6, i.e. the June issue is your last. Renew ASAP to be sure you do not miss any issues.

The cover: I don't know how it will come out yet, since this is the first time *Current Notes* is attempting a full color cover. But if all goes well, the cover should depict a scene from *Hero's Quest*, which is reviewed in Richard Gunter's "Starting Block" column this month.

This publication is produced using an Atari Mega ST4, an Atari SMI24 monochrome monitor and a Monitron Viking monitor, a Navarone scanner, and the Atar SLM804 laser printer. Most of the output is generated with *Calamus*. Some pages, including advertisements, are produced with *PageStream* and others with *Publisher ST*.

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From the Editor's Desk

by Joe Waters

When I am not working at my Atari on *Current Notes*, I am at my government job working on a Mac IIx. I don't do a lot of fancy things on the Mac. I write papers or memos and use Microsoft *Word* to do that. I send messages back and forth to my immediate co-workers and use Microsoft *Mail* for that. On occasion I might use *Excel* for spreadsheet work or, perhaps, *PowerPoint* for some briefing slides. In the background, *Hypercard* is used for a rolodex-style phone book and for a calendar of events. I've produced a couple of publications in *PageMaker*, but, having already done that, it has been more efficient recently to produce the documents with a word processor and then turn the file over to "specialists" whose job it is to make things look attractive for finished publications. After all, I am paid for my contribution to the content of the documents, not for making them look nice.

My use of my "workstation" is not atypical of that of other colleagues on my Mac "network." Why do I mention all this? Well, you may have heard or read about the newest, latest, greatest, operating system from Apple, System 7.0. A long time in development, it is now ready for prime time. Am I going to rush out and get System 7.0 to install on our network? Maybe. In about a year, we may consider it. As for now, things are working pretty well. It took some time to get to the point where things are working well and I, for one, am not inclined to rock the boat.

Let me tell you a little about our Macintosh network. It is the easiest thing in the world to set up. Buy your computers (several), buy an expensive postscript laser printer (single), unpack everything, get some telephone extension cords, get some network adapters, plug everything in it. There you have it, a network. Several users can share the same printer. Do whatever you want on your Mac. When you are ready to print, choose the print option, and off your document goes to the network printer. You can even share files, or send mail, by purchasing the appropriate software and dedicating one of the computers to serve as "server." Small group, simple setup, everything works just fine.

More people come, group grows, more Macs (newer models), more printers, more connections, and everything still works, sorta. You discover that the latest Macs come with a newer "system" and, when that is installed, it configures the printer to be compatible. However, someone with the old system sends their file to the printer and, finding it incompatible, it has to "reconfigure" the printer. The competing systems are spending all their time reconfiguring the printer! So, everyone on the network has to use the same version of the system. Whoever is lucky enough to be "system administrator" goes around to every machine replacing the system files.

Apple software is user friendly. Just pop in a disk and follow the prompts. Let's install the mail system on the new computers. Pop in the master disk, follow the prompts, whoops! Problem: the installation program, developed before

these models existed, doesn't know anything about this model computer. It can't even boot the computer; installation aborted. (Call in Mac Guru; figure away around problem.)

Now, some people who were perfectly happy with what they had before the arrival of the new computers, and new systems, find that some of their programs don't work anymore! Seems there is a problem with that program and the new system version. Hmmm, have to fix that. Someone else discovers a nifty new desk accessory and installs it on his workstation only to discover problems suddenly appearing. The new program seems to be incompatible with something else that was on the system. But what is it? Don't know. Trial and error testing is required to track down the conflicting programs. And, of course, the worst case is when somebody tries something or some program on their computer which "brings down" the server and crashes the network. Now nobody can get to their mail (it was on the server) and where do you suppose they kept all their important messages? Yep, in their mail files on the server.

Eventually, things do settle down and the network stabilizes. No more crashes, everything is running just fine. Everybody is content with the system since it is working and they can get their jobs done. And now, enter System 7.0.

System 7.0 is not a minor change. It is a big change. More software will be incompatible. Will the company want to buy upgraded versions of "new" software that will be needed to take advantage of System 7.0 features, or maybe even just to run under System 7.0? Will the users be keen on seeing their nice stable world suddenly disturbed? Will they want to face the prospect of learning a new program (it just took them a year to get comfortable with the old program)? Since everything seems to be working perfectly fine now, just what exactly again were the terrific new "advantages" we will be getting from switching to System 7.0? Will these advantages outweigh all the disadvantages?

Adding up all these questions, I think we will wait on System 7.0. I think we are not unique. Businesses have rushed out and bought computers. They have rushed out and purchased software. They struggled to train users. They purchased new computers and new software and provided new training. They have gained a good deal of experience in this area. That experience has taught them to be cautious.

The computer industry has grown dramatically by the feeding frenzy of everyone grabbing up every new version, every faster machine, every slick gizmo. But, the feeding frenzy is over. We are in a recession and people are discovering what they have is good enough. It will be interesting to see how the computer industry adjusts to the new realities.

P.S.: Atari, you can't rest just yet. You still need to produce EGA quality color graphics.

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Letters to the Editor

Atari Door-to-Door

To the Editor,

I have been using my Atari 520ST for about four years now. During this time I have listened to many voices saying Atari should do this or do that, most of these voices complaining that the whole world has not appreciated nor converted over to Atari because the company had this fault or the other. Whether or not the world converts does not effect me so much since I own and enjoy my machine, anyway.

I certainly hope Atari will continue to be a viable company, but I wonder why the concern of other owners? I deduce it is because the others want better software support. There is already more software out there than I can ever hope to use. In fact, I own more software than I can probably fully use in my lifetime. That aside, I suppose more support means more competition and better products.

OK. I think the real reason is much more visceral. We love our machines for a variety of reasons, all of which condense down to power, a personal power which is constantly trying to find expression. So, if others prefer machines different than ours, it is taken personally.

Meanwhile, the Atari Corporation is trying to run a solvent business with a very volatile product and market. To advertise or not to advertise is part of the question. The other part is how much? Other companies have invested megabucks into ad campaigns that have not produced justifiable fruit. It seems to me that Atari, over the years, has been trying to simply be prudent, balancing market and production without going out on a limb. Meanwhile, us Atari folk can keep our little secret and enjoy what we have... or can we? I have an outrageous idea to file with all the other outrageous ideas.

Consider first, that Atari wants to make inroads in the business use of their computers. So they compete head on with IBM. Atari wants to make it big in education, and run up against the big Apple. The logic is that if people use the machine at work or at school, they will want one at home. Turn the

logic around. If people use one at home, they will want one in school or at work.

Atari was born to be a home computer. No other machine on the market fits that niche better, period. And yet, the Atari can function perfectly well in other settings also.

Conclusion... Atari would do well to target the home instead of business or school or some other specific industry. Atari Corp. has been doing this to some extent, but has been trying to imitate the sales techniques used by the other companies, thus competing head on in markets already nearly saturated by the competition. A new approach is needed.

Direct home sales. Wait, don't touch that dial. Think about it. Encyclopedias costing more than Atari computers are sold directly to the home, as are vacuums, pots and pans, cutlery, insurance, etc. Why not computers? This is wide open!

It shouldn't be difficult to convince the average household that today's technology requires the advantage of a home computer. Give your kids the edge! Go on line for sources for research papers. Bring work home from the office. Better yet, earn money at home with your Atari. Music, graphics, publishing, Atari has it all! THROW AWAY THAT GAME MACHINE, or better yet, sell it to someone else. They can't begin to compare to what an Atari can do, anyway. Everyone in the home can use it; they do in my home.

Atari should love this. Just look at some of the advantages:

1. A very low ad budget. No TV campaigns or glossy ads in expensive magazines.

2. Talk about target marketing! You literally go in the front door and reach the other markets via the back door.

3. Sales and production match up, orders come in for what is sold.

4. Direct customer support which means happy customers. The dealer goes to the home, gets the order, delivers the product, sets it up, demonstrates it, and follows up as needed.

5. While following up, make another sale for a monitor, disk drive, software or whatever. (Are you getting this? Can you see the potential?)

6. This is a proven market strategy. Atari is not really experimenting nor putting megabucks out on a limb such as they did with Federated.

7. The computer is not more expensive, and in many cases, is less expensive than many items already in the home.

8. The seller will have tremendous flexibility for packaging the product. I don't need to spell this out, do I?

9. This isn't a one time sale. The distributor/independent seller will have repeat and ongoing sales.

10. Not just the computers will be involved, but Atari's complete line. A free subscription to Explorer will keep the customer abreast of what he needs next.

11. Atari could do its own financing, underwritten of course by a finance company, just like the other direct sales people do it.

13. As I see it, Atari doesn't have anything to lose. There are very few distributors left in this country that would be hurt. Of course, some urban areas could be off limits to protect established outlets.

That's it, outrageous or what? There are other advantages to the idea, but I would weary myself explaining them... I can't think of a single disadvantage. So, Atari, are you going to continue following everyone else, or are you going to beat your own path? Nothing personal, you understand.

Sincerely,
Peter K. Bellville
Galt, CA

Stay Cautiously Current

Dear Mr. Waters,

Enclosed is my check for another year of *Current Notes*. I do appreciate this rather unique contribution to Atari computermania. Your emphasis on candid and thoughtful critiques has been of great help to me and surrounded, as I am, by IBM believers, *Current Notes* rescues me from isolation and the feeling that I am not part of the "real" world of computers.

Please don't lose the straightforward, yet intellectually sophisticated, tone of your production. Too many computer mags are either all "glitz" and promotion, with little of substance, or so highly technical that one has to wonder about the extent of their readership.

Speaking demographically, a subject of urgent importance to publishers, I guess, I am not representative of a very significant group. Past seventy, semi-retired and a bit of a curmudgeon, I could easily fade away if not for my Atari (a MEGA2 expanded to 4 megs, Spectre GCR, and pc ditto successfully installed by Soft Ware Etcetera of Norristown, PA., one of two Atari dealers that I know of in the entire Greater Philadelphia area.)

Fortunately, I enjoy learning and the frequent problems that are part of the baggage of the computer enthusiast are a source of considerable satisfaction to me. When I recapture seemingly lost hard disk data, I feel like running into the street yelling "Eureka" and when, after much exasperation, I determine the most efficient way of rearranging my partitions, or how to avoid crashes by optimizing the contents and file sequence of the programs in my Auto folder, etc., etc., I feel fulfilled. True, these are no great feats but when you are my age and many of your friends are either dead, dying, or in various states of decay and almost all live in dread fear of "computers," my Atari, together with *Current Notes* and *ST Informer*, keep me actively involved and "Current."

But, don't change more than you have to in order to stay "Current." For example, your recent switch to *Calamus* from *Desk Top Publisher*, keeps you "Current" but fortunately the changes have been negligible. This reader is much more interested in what your contributors have to say.

For me your style and format says,

I am a serious yet highly readable journal that teaches, critiques, and doesn't suck up to advertisers. I will capture your interest by what I have to say and not try to divert or massage you with a lot of "cutesy-pie" gloss. I am easy to read. My print is large and clear on a non-glare semi-matte paper. Oh! don't think I am not an admirer of things beautiful and the technology that creates these wonders. It's just that my mission is different and I suspect that my readers are too.

A number of contributors have referred to Atari's failure to stay at the cutting edge of the technology while

others seem quite content with a computer that is so beautifully "human engineered" and that fully meets their needs. For myself, I have mixed feelings about the burgeoning technology. As one application after another seeks to replace a very competent predecessor, that most users have only partially explored, you wonder how you can keep up or if you even want to.

The drive to always be at the "cutting edge" of the technology deserves examination. Because a technological improvement is possible doesn't automatically assure that it is a much needed capability. An improvement that serves, primarily, to rescue or adjust to a highly inarticulate method may well be a step backward. Having spent the last ten years of my "working" days developing a computerized patient data system for a large mental institution, I can't help being somewhat amused by the obsession with the development of programs designed to understand hand written words and human speech. They should test these programs on doctors' written prescriptions. I would feel a lot more comfortable if my doctor was required to enter my prescription on a word processor or perhaps, better still, a palm size device like Atari's Portfolio that could check the prescription against my medical history, current other medications, checking for possible adverse drug interactions and, yes, inappropriate dosages etc. etc. We should pay more attention to the dangers inherent in the inevitable transcription errors that are the products of casual speech and sloppy writing. The technology is exhausting itself going backwards and adjusting to ineffective and error loaded modes of communication. This may very well be just another "Edsel" phenomena.

Better, we should develop improved ways of recording data and communicating with one another rather than to adapt to inarticulate modes of communication. As for speaking to your computer, can't you just see how that would work in a crowded office with everybody talking to his computer. Instead of seeking to accommodate those who are resistant to the new technology, we should identify needs and then seek to develop the technology that will best meet those needs. Written and vocal communications have served us well for thousands of years and are not likely to become much improved by

simulations. Data input methods that minimize redundancy and transcription errors are already here and doubtless can be much improved. The real problem is the lag between discovery and utilization.

Back in my college days, during the years of the great depression, there was a Mom & Pop store, run by an elderly German couple, that made great cornbeef and potato salad sandwiches on thick slabs of Jewish rye. The cornbeef was razor thin, but it was tasty, cheap and very filling, a meal for a pittance when most of us had little more in our pockets than carfare to and from school. Well, Mom & Pop were so successful with their sandwiches that they were soon able to abandon their hole in the wall store and open a "modern," cafeteria. You know the end of the story. The cafeteria at the "cutting edge" proved to be an "Edsel" and Mom and Pop, probably, never did understand what had happened. Do stay plain, stay tasty, but cautiously "Current."

Currently yours,
Mort Lipton
Southampton, PA

Thank you, Mort. Your comments are well-taken and appreciated. However, don't assume you are in such a minority position. Quite a few CN readers will easily relate to your experiences. -JW

Questions and Comments on the April Issue

Dear CN,

It's always a pleasure getting a new issue of *Current Notes*. I thought this issue [April] was late, undoubtedly a complication of your trying to master *Calamus* on the fly.

I was skimming through Ben Poehland's article, "Print Shop Printer Driver," when I noticed his comment that his new 24-pin printer took a lot longer to print out a page than his 9-pin printer had. I've noticed the same problem. When I installed *Word*Up* with a 24-pin Panasonic KP-1124 (360x360 resolution) printer, it would take as long as 20 minutes to produce a page in "final" mode. (That's using a plain vanilla 1040ST with the program on floppies.) The output looks really sharp, but I'm not keen on leaving the computer run overnight just to get a 20-page docu-

ment printed. I installed the printer on another set of floppies in 180x180 mode for when I want fast printing.

I have been told that there's nothing much that can be done to improve performance short of accelerator boards. But I wonder ... I notice that in 360 mode the computer makes frequent accesses to the disk drive which it rarely does in 180 dpi mode. Is this because the RAM is insufficient, would an upgrade to 2 meg speed up printing?

The other thing I've noticed is that in 360 dpi mode the printer prints across about seven and a half inches, stops, and, after about five seconds, finishes printing the line. Is this two step operation because the 8K factory installed printer buffer is too small? Would the 32K buffer upgrade mentioned in the manual speed up printing? Or is it just something about *Word*Up* that makes it take forever to print out pages?

I notice that David Troy also mentions significant printing time differences between *Calamus* and *Pagestream* otherwise using the same computer and laser printer. How does *Calamus* plot 8 million dots in one minute or so when it takes *Pagestream* 15 minutes? What's their secret?

Fred Schumacher wrote an interesting, inspirational letter this time around. He's right that the ST's relative small size and few components make it an ideal student and home computer. Atari's decision to try to get into chains like Circuit City and Sears is a definite attempt to break into this market and should be applauded.

Which brings up an interesting approach to promoting one's line of computers. Earlier this year a local science fiction convention included as part of their programming a day-long series of seminars on using the computer--for desktop publishing, graphics and animation, video, and MIDI. The promotion was virtually cost free to both sides, an extra small meeting room for the convention, carting out and setting up a few demo models for the dealers. While the rewards are potentially quite good. Science fiction fans have excellent demographics for the computer dealer. Many of them are young middle-class kids with a big future ahead of them. They are within a few years of buying their first computer so a good impression will reap dividends later. And because it will be their first com-

puter, "Power without the price" will be a big selling item. Later, as they advance in the world, they will take their awareness of the Atari line with them, opening a door for Atari business machines. The only sad note in this story is that it was an Amiga dealer, not Atari who put on that day long seminar.

I keep hoping for more coverage of Atari's Portfolio computer (upon which this is being typed), at least something a little more concrete than the hype in *Atari Explorer*. Reports that a 20-meg hard drive is being developed for the Portfolio impresses me for the technical accomplishment; but, I confess, I'd be much happier with a floppy drive. I use the Portfolio for initial data entry during the day then transfer files to my ST at home each night. Swapping disks would be a lot easier than firing up the modem all the time. If anyone has heard anything about hooking a floppy drive to the Portfolio, I would sure love to hear about it.

Mike Heininger's article about software copyright reminds me of the dilemma of 8-bit owners looking for the appropriate software as well as my own efforts to find a decent stand-alone spelling checker to use with *STWriter*. What do you do when the software you're looking for was abandoned years before and its manufacturer has gone out of business? Is it still software theft to distribute copies? Technically, yes, but who's being derived of their rightful income when the product has already been abandoned?? Passing on the ethical and legal considerations for now, I can't help thinking it would be nice if there were some central Library of Dead Software where one could buy--strictly at cost--abandoned programs that might best fit one's needs. I wanted a better spelling checker for *STWriter* than *Speller* and eventually found a copy of *Thunder* from E. Arthur Brown, who looks to be selling it from out the last of his inventory. What happens when he's out and someone else wants a copy? It would be a shame to say they can't have it when all it takes is a disk and a few xeroxes to send them program and manual. Sure, it's wrong, but as the ST increasingly becomes an orphaned platform, is it that wrong?

David Small's look at his SST upgrade was fascinating reading, as always. He covers so much ground one's

left to wonder: what's left to talk about? He has talked about the different ways a computer can drive a monitor, perhaps he can come back and talk about which way is best? Or SCSI vs ASCII?? Or, whether Localtalk is the best way to network computers or just a standard we'll have to live with?

For all I enjoy David Small's writing, there is one habit of his I wish you'd change while editing his columns for publication. That's his habit of bracketing words with asterisks for emphasis. I suppose it's a habit he's learned from chatting on BBSs where you can't underline or set in italics words you want to emphasize, but in a magazine that's trying very hard (and succeeding very well) to look professional, his *---* sticks out looking very *childish*

Perhaps the Junkyard Pussycat could answer a question about Atari's new FMS GDOS replacement system. Discussions of it that I've seen in other magazines leave me with the impression that these new FMS fonts could be used right now in place of GDOS fonts used in, say, *Word*Up*. But somehow this doesn't seem right? Do GDOS-using programs have to be rewritten to use these fonts or do we simply need a patch that would call these fonts when a program calls for a GDOS font?

Great article from David Troy on the SLM804 and 605 printers. I'm impressed, too, to see Atari making a direct response to David's article comparing the Atari and Magnavox monitors. It's like they're getting serious or something.

I shuddered at the thought of putting an ST and monitor on a pair of folding TV trays, not to my mind the sturdiest or most stable of platforms, but Vernon Smith's suggestion did challenge me to consider different ways to set up my computer. His do-it-yourself 3x4 box table sounds very tempting. It has a lot of elbow room which I like and need. I hope you can get more articles from people on how they've arranged their computers.

The Boston Computer Museum looks like a really neat place to visit. It's good to see some place actually building a new museum since here in Detroit the talk has been whether the Art Museum or the Main Library or both will have to close because of budget deficits. It is a bit astonishing to think that we got a man to the Moon and

back using a 36K computer. On the other hand, from what I hear, the computer on board the space shuttles aren't that much bigger or more sophisticated. I mean--they're still using iron core memories and tape drive storage!

Brian Miller mentions a program, *1st Convert*, that changes certain documents into *1st Word* documents. I'd like to know more about the program because I like *STWriter's* ability to search and replace control characters, which *Word*Up* can't do. (It can search, but won't replace.) Since I spend a lot of time converting ASCII files from the Portfolio into *Word*Up* files, it would be nice to be able to use the faster *STWriter* to do the reformatting before going into the more powerful *Word*Up* to finish layout.

Brian also mentions something called Sift from Bruce Noonan. Is this a real reformatting program or just a proposal for something that ought to be written?

I think I've asked enough questions this time. Maybe I'd better wait for a few answers before carrying on.

Brian Earl Brown
Detroit, Michigan

Thanks for Switcher

Dear Ben,

I really want to thank you for the April article on the XEP80 "Switcher." As soon as I got my XEP80 up and running I was disappointed to think that I'd have to put another monitor in my already crowded workspace. I had already relegated the XEP80 to another system in a separate room dedicated to word processing when what I really wanted was 80 columns online. The unit was easy to assemble and works like a charm.

Again, thanks. The 8-biters out here really appreciate your efforts.

Alan J. Frazer
GENie: A.FRAZER1

The Alchemist Responds:

I received a couple requests from readers who were not as technically adept as Mr. Frazer and wanted to know where they could buy a Switcher or if I could build one for them. I have turned down all requests for custom assembly of Switchers for people; I just don't have the time.

I regard the Switcher as my contribution to the Public Domain and have no interest in profiting from it. So, if you guys at CSS or IC or Toad or Best or anyone else would like to make and sell these things to their customers who don't want to build them, please do so!

My 80-Column Switcher is such a simple, common sense device. I think it's a scandal that Atari didn't include such a switch as part of the XEP-80's hardware.

Ben Poehland
Frazer, PA

A Minor Correction

Dear Mr. Poggiali and Mr. Poehland,

Thank you both for your kind mention and reviews of Bresnik Software. Your diligence in ensuring the completeness and accuracy of the reviews is exemplary!

I do have one minor correction to the review of "Word-Search Maker": the wording "files may be loaded from wordprocessors" might lead someone to think that *Word-Search Maker* could load foreign text files. The converse is true: the .PUZ files created by the program may be loaded into a wordprocessor, such as *AtariWriter Plus* or *Speed-Script*, where the puzzle may be modified. You can, for example, use global search-and-replace to eliminate spaces between letters and use w-i-d-e print to make the puzzle more legible or jumble the letters of the words or make a "fill-in-the-blank" puzzle to accompany the word-search.

The software was developed for use in my own classroom. The 8-bit Atari is still a viable choice, especially for individualized instruction and enrichment. I would like to know of others using the Ataris in education. If there is interest, new programs in this series might be created.

Again, thank you for continuing to support the Atari 8-bit computers by writing interesting, informative, and accurate articles!

Sincerely,
Barton M. Bresnik

The Human Element

Hello Joe Waters,

Well, you really did it this time!
YOU and DAVE SMALL.

Between the two of you, I really don't know who has the most courage,

the most heart; he who wrote I Remember or he who published it. Maybe it's equal. Anyway, once more someone has demonstrated that the Atari community is about more than bits and bytes, it is about people first and their choice of toasters, second.

When a day passes without me being at the keyboard of my 1040ST, even briefly, it's unusual; my kids are no longer at home but when they left, I feel they took something with them that is worth remembering in this fast moving world: People are important, things are secondary. That story only barely begins to emphasize the point, my Atari computer (or any other, for that matter) would be absolutely worthless without the prime forces behind it, the HUMAN element. If it existed at all.

Thanks Dave Small and Joe Waters, for what it is worth, you have both earned a very warm spot in my heart and mind.

Gary C. Matteson
Norfolk, Nebraska

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ATARI'S NEW DEALERS' DELIGHT, ATARI RENT-A- FACTORY & ATARI IN FORMER EAST GERMANY

Several months ago they vowed never to call Atari again. Now they're wreathed in smiles.

And the Money "Rolled" In

They came from near and far, or at least a handful from far, the rest of the people attending the 14 May stockholders meeting at Atari were employees or nearby denizens. Sam Tramiel stood in front and Jack sat near the back. It was a forty-minute presentation with about three questions. Rehbock was seen running *Retouche Professional* on a TT. The STNotebook (out in the 3rd or 4th quarter) and the STStylist, as the STPad is now named (out sometime "early" next year), were the premier pieces of new computer equipment that were scheduled to carry Atari into the future. Themes? Atari seemed to be betting its ability to compete with grown-ups on its new, "Direct to Printer," high-end publishing operation that was disclosed last month at CEPS in Chicago. There were words about going up against Sun, IBM, Macintosh and the rest, and besting them with Atari's TT and the powerful software from Europe that accompanied it. That was the message.

The balance sheet had more disconcerting news. Sales in Germany were down. The Portfolio had stopped selling in the U.S. The Lynx was leader of the class with all its new programs. Atari computer sales in the U.S. were under 10,000 (not put out for the public). The bottom line? Atari had made a world-wide profit of \$14 million. Initially they had lost about \$33 million in the U.S., but a debenture buy-back, read debt, had saved the day. It seems that stock specialists had decided that Atari was no longer a viable/serious U.S. economic entry and the price of their debentures had fallen to about 20% of initial value. So how do you make money, when every one else is losing theirs? You buy \$28.6 million of your company's debt back for the sum of \$6 million. That gives you a financial-statement credit of \$22 plus million which you can apply against your U.S. loss. How much, then, did Atari have to make net in the rest of the world to show a total \$14 million profit? The first correct answer to be received will get a complete Atari annual statement.

Breath of Fresh Air

Wouldn't it be nice to be a dealer of a computer company where you could explain your needs to the dealers' rep at the home office and he would try to work out a way for you to get more product, e.g. Mega STe 1's, the model without a hard drive which ST users, who already have hard drives but wish to trade up, are now clamoring for. Wouldn't it be nice to call your computer company's headquarters and not only get a live voice, but also someone who would immediately try to rectify a shipment of laser printers that was shipped without cables? And not only find the missing parts in your shipment but get them there to you asap. Then, above all, to be convinced that the guy talking to you was telling you the truth--that means telling you things as a dealer you could count on being true. A guy who would tell it like *it is*, even when *is* ain't all that good.

When was the last time Atari had someone like that working with its dealers? On the surface it would seem like years and years ago that a dealer would have been able to get that kind of response. One dealer in Florida told us several months ago that he had stopped calling Atari, because each telephonic encounter produced nothing but more frustration with Atari.

Now that same dealer is wreathed in smiles. "He's a great guy! You can actually get him on the phone. When you ask him what the chances of getting TT's with RAM boards are, he'll tell you and then try and work out a solution with you. No, this guy is a giant step up." Are they talking about Atari?

Yes! Mike Groh, the same Mike Groh fired, along with all the other sales personnel, in January and, by popular demand, rehired in February. It is he who apparently is the new human "interface" between dealers and Atari. Mike Groh is the object of all of the above accolades for the help he has been rendering dealers. A torrent of praise. Just to hear it is to cause a surge of hope that maybe there's still a chance for Atari U.S.. Dealers are quick to add, however, that if Groh had "the power of the purse," Atari might be selling thousands and thousands of the \$399 1040STe's right now; but to do that, people have to know it's there, and why it's a great machine at a rock bottom price. Keep it up, Mike!

Hats Off Atari

Is the Groh approach just a momentary "make-you-feel-good" grease job? It would seem not. In July, Atari U.S. is going to emulate Atari Canada in what can only be viewed as a genuinely positive step forward in creating some kind of a responsive dealer network. They will be holding a dealers' conference at Atari headquarters. Can the jaded, increasingly low-profit Atari dealers be expected to attend? One would expect so. Atari is flying in one individual from each of its "approved" dealers at Atari's cost!

Hats off, Atari, and hats off to whomever pushed the proposal through.

Kieretsu, Kieretsu, We Need You Now

The Japanese have developed a harmonious way of working with each other, with manufacturers, parts supplier, etc.; it's called "kieretsu," and in addition to the meaning we attach to it, of "one hand washing the other," e.g., a giant car manufacturer uses your computers and you use only his cars; it also involves accommodations of chip manufacturers, and hard drive and cases and computer screen manufacturers, so that it all comes together at just the right moment and the finished product is there and plentiful.

With that in mind it is a bit of a jolt to realize that not only does Atari not have this critical luxury, it doesn't even have its own factory to manufacture its computers in. "What!" you roar, What in the high heaven are you talking about? Not have a factory to make its

computers in? Where are all those machines coming from? Even if we only get 10% of the output and Europe the rest, there are still a lot of machines being made in Taiwan, no?"

The answer is yes, but Atari, to your possible astonishment, has to "rent" a factory when it wants a run of a particular computer to be made. When they hire a production run, they need to be sure that it is sellable, either here or there, or wherever. After all, the Tramiels were introduced to Atari when it was a company with bulging warehouses and no customers. But how do you know how many machines you can sell in the U.S. over a six month period of time, say? In the past we have observed that Atari has often mis-estimated its market. As a result, when it had a winner that people were clamoring to buy, it was often too little and too late. Appreciating the lead time required to sign up a factory for a run, some of us may become a bit more sympathetic.

For now, the solution appears to be to canvas all the dealers and find out how many machines of this and that they want between now and the end of the year. If you're a Macintosh dealer, that is difficult enough to know and commit cash to, i.e. place the order. But an Atari dealer who has been operating from hand-to-mouth and machine-to-machine, is hard pressed to order six months in advance. It means \$\$\$. It is one thing to order 20 1040STe's. It means a \$6000 outlay, but you can handle that. But the new TT's? Will you sell two or so a month? That would be 10-15 from now thru Xmas. But how many Atari dealers can dredge up the more than \$20,000 required for such an order. After all, that would represent only part of the inventory, and a part that nobody is quite sure will be a "seller." Thus you begin to see, whether you're on Atari's end or the dealers', you really do need some "kieretsu."

Circulation 40,000

Newspapers and self-criticism don't seem to go together. In fact, they don't, unless you're in East Germany, where in the "old days," if you didn't practice self-criticism you weren't allowed to practice journalism. With the unification of East and West has come a new press, a "different" editorial openness, and a collapse of the news industry. The communist youth daily, Junge Welt, shrank from a million to 100,000 and folded. The introduction of computers to the newsroom, bylines for reporters and higher salaries (still half of those in West Berlin), have allowed some papers to survive, e.g. the Neue Zeit (The New Times), if with highly reduced circulations.

But Atari to the rescue. In a two-room apartment in Leipzig, in a space not much larger than that used to produce CN, a dozen or so newswriters, plus a few teenage volunteers, turn out DAZ, Die Andere Zeitung (The Other Newspaper). This is the "East's" first independent newspaper. And the "highly computerized" staff, with their 21-year-old, anti-socialist editor, Jan Pe

ters, are engaging in genuine investigative reporting with humor and entertainment. To meet their deadlines, they also are currently using four Atari computers.

Three New Ones For?

PGA Tour, a great golf simulation of the Big Tour, itself. And full-tilt action pro football with *John Madden Football*, plus the NBA playoffs with *Lakers vs. Celtics*. Wow, you say, Electronic Arts is really doing it for the ST, once again. Wrong. They are all for the new Super Nintendo Entertainment System, where apparently EA anticipates a more sizeable market than the ST with its less than 200,000 U.S. computer base.

Atari & The Notebooks

STNotebook, Atari's latest addition to the burgeoning, smaller-than-laptop computer market (estimated to be a billion \$'s this year), isn't here yet. But HP's small computer is. The 95LX is one of the hand-held computers currently called "palmtops." Part of its considerable appeal is the fact that it has Lotus 1-2-3 built in. And does it have cables to attach it to an HP laser printer or other peripherals? No. Rather, it uses an infrared beam that lets it talk directly to the printer as well as other HP devices. How about that! At the same time, with pounding hooves out of the north, came a veritable flood of notebook PC's, AT&T's Safari, IBM's PC-L40, and Toshiba's T2000SX with its new nickel-hydride, long life batteries, not to mention Digital Equipment Corp.'s model that instantly sold thousands of their new notebooks, leaving them out of stock until July. (Atari is not the only one to mis-estimate demand.) All powerhouses with 1 and 2 meg of RAM, expandable to 18 meg in the case of the IBM, they cost between \$5000-\$6000. But, if the STNotebook lives up to its specs, there might still be a tiny slice of the pie available when it appears in the market place in the 3rd or 4th quarter. With the STacee purportedly discontinued, loyal users on the move may be quite interested in this one.

Timing

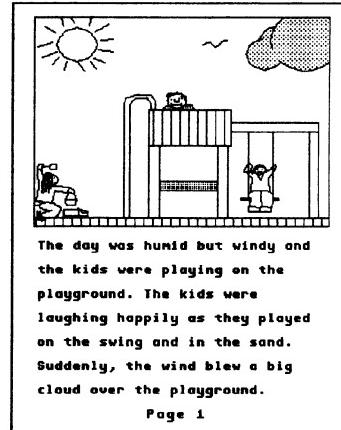
Finally, it's coming. Yes, the CD ROM should be on dealers' shelves as this issue is dropped in your mail box. There is still no word on how immediately we can expect a reasonable supply of product to use with it, but one of the reasons for its hold up has been the lack of same and, supposedly, this has now been corrected. On the heels of the CD will follow the TT in reasonable supply, i.e. some dealers already have a machine and others are told it will be a couple of months before they can expect theirs. This may not be all that pressing, because the first machines to be made available run at ST ROM speed, lacking a RAM board, and there is no software unique to the TT as yet available.

Atari has stopped manufacturing the Mega File hard drives and the line will be discontinued once the remaining stock is sold off.

Word Perfect

We *WordPerfect* fans believe it is one of the best productivity programs available for the ST. For some time we have been living off the lure of European users of *WordPerfect* for the ST, as source of hope that Word Perfect Corp. would continue to upgrade, or even release a new version of WP for the ST. Our most recent maintenance update at the end of last year nurtured that hope. There was also a report that Europe would order, collectively, about 10,000 copies of WP. Amidst rumors that WP Corp. had ceased all support for the ST, and the 10,000 European order had evaporated, we contacted WP Corp. We called James Marshburn, head of the ST development group. He said we would have to talk to "Corporate Communications," headed by Jeff Ascerson, for any word "on that matter." Finally David Pearson of the International Division set the record straight. First, there never was a 10,000 European order, but after consultation with their representative in Germany, they decided the ST market just wasn't sufficient to permit investing further sizeable sums in it. WP Corp. would continue to sell *Word Perfect* for the ST, and fix bugs in the current program as they might be reported. But alas, further development for the ST program would be discontinued. Thus, the fall of another Titan in the world of Atari ST programs.

Can educational software really teach your child to think?



The day was humid but windy and the kids were playing on the playground. The kids were laughing happily as they played on the swing and in the sand. Suddenly, the wind blew a big cloud over the playground.
Page 1

*** Yes! ***

Kidpublisher Professional
Kidpainter

Super Kidgrid
Telegram

Atari ST/STe/Mega with color monitor required.
Printer must accept an ST screen dump.

kidprgs by D.A. BRUMFEE
217 337 1937

Calamus Fans, Smile!

CalAssistant Has Arrived!

After a couple of years of using *Calamus* as sort of a graphic/text adventure game, we were stunned when we found out how relatively little of "the adventure" we had mastered, as CN switched from *Publisher ST* to *Calamus* to do its layouts and final printer copy.

Then *CalAssistant* appeared. An online help accessory that can also be run as a program, in concept it is like *Hypertext*, layered levels of text windows that explain each of the myriad of *Calamus* icons and the functions they execute. "What?" you, a *Calamus* user cry. How can an accessory contain the information contained in a 100 plus page reference manual? Simple. *CalAssistant* has two modules of online help, containing over 450 help files.

Your face contorts and you wonder why accessing this help will be any easier than accessing the icons in *Calamus*. Let it be said, once and for all, "It is." It is because of the way they have linked the small ikon identification window at the top right of the *Calamus* screen with *CalAssistant's* layered menus. By way of example, you rest your cursor on the left most ikon in the second line of icons, below the major text ikon, "A." The help window tells you this is, "General text info." With that knowledge you select the same title from the *CalAssistant* menu, and there is a second menu with all of the functions of the text ikon represented. A click on any one of them and bingo! the next text window before you explains the functions and gives you hints on the most expeditious use of it.

After a 20-minute tutorial on page layout that takes up half of the 20-page pamphlet accompanying the accessory, I felt comfortable for the first time in laying out different sizes and styles of pages without the former eruptions of frustration because *Calamus* wouldn't do what I told it to.

Derrick Hall and Spar Systems (381 Autumn Ave., Brooklyn, NY 11208; (718) 235-3169) have a winner on their hands. With a hard drive and 2-4 meg of memory, it whips along, even inside *Calamus*. With less memory it is best to use it to solve your problem before booting *Calamus*. Whether an "old hand" or a newcomer, you need it, at only \$34.95.

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the 8 - Bit Alchemist

by Ben Poehland

Mail, MacInker, and Other Goodies

During the past month The Alchemist has made a mighty effort to catch up on all the mail generated by my March and April columns. If you wrote me in April or May and haven't received a response, don't despair. I'm currently running 4-5 weeks behind in answering inquiries. In the past five weeks I've sent out maybe 45 letters and E-mails; this is one tired Alchemist who is *definitely* looking forward to a summer break! And the good news is, I'm now answering the mail at a faster rate than it's being received.

Reviewers and Software

I still have a couple letters to write to people who volunteered to review 8-bit software, late arrivals in April and May. I had intended to whittle down the number of reviewers to 10, but it looks like my official Reviewers File will end up containing about 16 names. I turned down 4 or 5 people, and several more who had made noncommittal inquiries withdrew when I furnished more detailed information. For those of you still trying to make up your mind whether you should volunteer, I'll give you the word. Please don't! Really, I already have more reviewers than I need.

I'm really impressed with the quantity and variety of equipment 8-bit people are using. Nearly all the respondents had more than one machine, and perhaps a third also had an ST. As I mentioned last month, I gave priority to respondents whose interests were primarily 8-bit, so only two of the present reviewers are also ST people. Perhaps four or five reviewers are what I would call 8-bit "power" users, with fast (2400 baud) modems, hard drives, modified floppies, and RAM upgrades. Two reviewers reported owning an

XEGS as part of their hardware setup. Most of all, I was impressed with the enthusiasm expressed by all the respondents, which made it very difficult to turn people away. Suffice it to say, the 16 people in my file are all highly motivated individuals. They fairly represent a slice of American society: male and female, young and old, white-collar and blue-collar, novices and veterans, country folk and city slickers, students, workers, and retirees.

The sad part is, most of these fine people are idle. I sent review software to only three of them (stuff I received from Bresnik and Sagamore), which was all I had. A few more, not content to sit around waiting for software that might never come, have spontaneously submitted reviews. Still, I have 10 eager people who would like to get a program to review. About the only thing I can say is, if someone out there in the land of Atari 8-bit commercial/shareware/PD distribution (AKA Twilight Sources) sends me software samplers, I'll do my best to see to it that the contributing source is acknowledged in the review. So, guys, I've done my part. I've assembled a small army of dedicated 8-bit users just itching to do reviews. Whether more new 8-bit programs will be exposed in the pages of *Current Notes* is now largely up to you 8-bit programmers and distributors. Please don't let us down!

So, if your name isn't among the chosen 16, does it mean you can't write a review of some software that's near and dear? Not at all! I'll be glad to read anything anyone cares to send, and I'll send you a written response. Just be sure to review the annual indices of *CN* to make sure the program hasn't been reviewed in these pages already. I live in dread fear of having to reject a beautifully written review prepared by some poor soul who didn't do his homework. It

would be very poor editorial practice to print new reviews of previously reviewed software, as I'm sure the Boss (er, Joe Waters) would agree. With an expected increase in future 8-bit review activity, it is also possible you might conflict with reviews already in preparation. The best insurance against such unfortunate occurrences would be to send me a postcard or E-mail; I'll give top priority to all such inquiries.

Newsbytes

It looks like the 16-bit Atari mag *ST Journal* has gone belly-up and is being replaced by a new publication called *AtariUser*. Although the premier issue of *AtariUser* (May 1991) was distributed free, a regular subscription will only set you back \$15/year--a special introductory rate. The reason I mention this is because the new magazine will have broader coverage than its progenitor: it will attempt to cover all Atari products past and present, not just the ST. Including the 8-bit machines. The 8-bit editor of *AtariUser* is none other than Chuck Steinman. (Yes, Steinman of GUMBY fame.) Should be interesting! The new publication also contained a 3-page list of all the Atari user groups in the USA. For info, subscriptions, etc., write *AtariUser*, 13 W. College St., Covina CA 91723.

Twilight Sources

In my never-ending quest for new Sources, I send a lot of postcards. I sent out a mess of them in late January, and just last week one postcard was returned to me marked MOVED--NO FORWARDING ADDRESS--RETURN TO SENDER. (Let's see now, postage is 4 cents higher, and it took, ummm, four months for an undeliverable letter to be returned ... perhaps because the card only bore 15-cents postage?) The postcard was addressed to Dino's RYO, 664 W. Arrow Hwy, Suite 197, Sam Dimas, CA 91773. So, unless someone can tell me what happened to Dino's, it looks like The Alchemist will have to scratch one Twilight Source.

All is not lost, however. The Edwards catalog (Jeff Edwards, 138 South Main Street, Traveler's Rest, SC 29690), looks like a good source of 8-bit public domain, shareware, and specialty commercialware. Like Vulcan, the Edwards catalog is on disk. Item listings are not as detailed as Vulcan's, nor is the listing as extensive. Edwards does offer some unique products that aren't generally available elsewhere. Software categories are applications, specialty/commercial (as per the announcement in *CN* March '91), educational, games, graphics, telecom, utilities, and used commercial software. The used stuff is a category I haven't seen before, described as consisting of original media plus docs. The used stuff has a special price category separate from the PD/shareware listings: \$2.50-\$9.00 depending upon the program, plus a \$3.00 shipping charge. PD software is offered on double-sided disks

for \$3.00/disk with free postage for orders of 3 or more and a fifth disk free for every four disks purchased. Send the man a buck. Tell him The Alchemist sent you!

Inky Tales

This month I want to address a topic that never fails to arouse curiosity and lively discussion: re-inking dot-matrix printer ribbons. I've been re-inking ribbons and rollers for years as a matter of convenience, common sense, and environmental stewardship. I can't figure why folks get so worked up over it.

Anyway, before you can re-use those dry ribbon carts you have to have some decent ink. Close to impossible these days, since most stamp-pad inkmakers have converted their formulations to glycol- or water-based compositions. Those aren't suitable for use in a typical DM printer. The reason is that most DM printers utilize the ink as a lubricant for the dot head. Oleic acid (a component of soap) or some other similar greasy hydrocarbon derivative is a major component of DM inks, typically 25-35% of the formulation. Using the wrong kind of ink will cause the head to overheat, warp, and do a hara-kiri routine while you're in the middle of printing out some terribly important document. A replacement dot head from Epson will typically lighten your wallet by \$60-\$120 depending on the printer model.

Oil-based inks from office supply stores are usually sold as "numbering machine ink." Time was, you could buy a little of that stuff for stamp pads. It was also great for re-inking printer ribbons. The liquid form of numbering machine ink is now rather difficult to find. Today's formulations are likely to be too viscous for use as ribbon ink; the stuff is now typically sold in tubes with the consistency of toothpaste.

Hand Jobs

I was very lucky. Sometime during my high school days (you know, back in the Mesozoic Era), a small bottle of black ink somehow migrated into my possession. The label reads United States Government Printing Office, Black Numbering Machine Ink, Formula No. 240; it came complete with a little brush in the cap. The oil tends to separate from the pigment when it stands a long time, but it's incredibly useful stuff. I started out using it on stamp pads, then typewriter ribbons, 1027 rollers, and finally Epson printer ribbons.

My first DM printer was a 9-pin Epson LX-80, purchased in 1985. The LX-80 has a compact ribbon cart whose size and construction varies considerably compared to earlier and later models. The FX-, MX-, and RX- series Epsons used a long style cart, as do the more recent models such as the T-1000, LQ-500, and L-1000. I kept a few spare cartridges for the LX-80 and re-inked them by hand when they ran dry. It was

an easy, albeit boring, task. I cranked the ribbon forward until the seam appeared. Using my little bottle of Guvermint ink, I would wind and brush, wind and brush, until I got to the seam again. After awhile I got to where I could do one in less than an hour; it provided useful activity for my hands while vegetating in front of the Babble Machine. [NOTE: "Babble Machine" is a term used by H. G. Wells in an 1895 novel, *When the Sleeper Wakes*, to describe the invention we today call television.]

In late 1989 I retired the LX-80 in favor of the 24-pin L-1000 which uses the long style cartridge. Early in 1990 the ribbon cart on the new L-1000 ran dry. No problem, I settled into my usual re-inking routine in front of the Babble Machine. I soon learned the long style cartridge held several nasty surprises. First, it was more difficult to manually apply the ink due to the length of the exposed portion of the ribbon. It sagged in the middle; it's really hard to paint something that sags. The sagging and looseness of the ribbon also made it more difficult to apply the ink evenly; the final result was blotchy and generally overinked. But worst of all was the time it took: about 4 hours! Lawdy, I thought I'd never reach the end of that ribbon!

What I didn't know was that the compact LX-80 cart only holds about 18 feet of ribbon, but the long style cart contains around 60 feet! More disappointment was in store when I placed the ribbon in service: the first 20 pages or so were way too dark, with ink soaking into the paper and diffusing. Hand-inking these long style carts was a failure, not worth either the time or the effort. I was paying about \$6 apiece, plus tax, for new replacement cartridges. With three Epsons around that require them (two L-1000's and a venerable MX-80), I typically use up a cart every six weeks or so.

Wastemaker Syndrome

So, \$50 a year for ribbon carts, small potatoes--right? Maybe so, but it rankles me to discard something when I feel the item has been deliberately designed to force me into the mold of a Vance Packard-style WasteMaker. I'm paying \$300 a year in cold cash to my waste disposal company so they can permanently ruin good land by filling it up with all the junk people throw away. A good portion of the stuff in landfills consists of appliances, plastics, things that could have been fixed and used again--and that junk will remain there long after you and I have passed from this realm: some legacy for our children! Our "civilized" culture (lifestyle) encourages us to profigate waste in a million subtle ways, and trashing ribbon carts is just one of them.

We Alchemists, modern-day descendants of shamans, medicine men and witch doctors, respond rather poorly to the demands of modern civilization.

We still bear the rough imprints of earlier times (Mesozoic), when Man had to make the most of meager resources and lived in dread fear of Nature's wrath upon foolish mortals who wasted Mother Earth's precious gifts (shades of Bresnik's *Ecologist*). Translation: for almost a year I kept buying new ribbon carts to replace the ones that went faint on me, but I tossed all the used ones in a drawer. In the marrow of my Alchemist bones I felt there just had to be a way to prevent all that plastic from trashing good American land. After all, in five years of using my LX-80, printing thousands of pages, I only trashed two cartridges. One was broken, the other genuinely worn out.

Enter MacInker

During last year's Christmas season, things at work were kinda slow. In the lab I was doing some deadly dull purifications of an extract from jungle leaves. My high-tech liquid chromatograph did most of the work; I just showed up at an appropriate time to collect the chemically purified medicine in a flask. To relieve my boredom, I started leafing through the ads in *Computer Shopper*. For those of you who've never seen this publication, *Computer Shopper* is a supermarket tabloid-sized monthly that weighs twelve pounds (I'm not kidding). The thing is packed with computer ads from front to back. Every so often, by mistake, an article on computers somehow slips in.

Buried deep in the innards of this mammoth monthly was a small ad that instantly grabbed my attention. A company called Computer Friends advertised a machine, called the MacInker, that purported to automatically re-ink any ribbon cartridge from any brand of printer! There were several different models of the MacInker available, including a less expensive model specifically designed for the long-style Epson carts. The thing cost \$45, about what I was paying for a year's supply of ribbons. It might have taken a whole millisecond for my curiosity to build to genuine excitement; in a flash I was on the phone to the Friends to place my order for a #271-EP MacInker, plus an extra bottle of black ink.

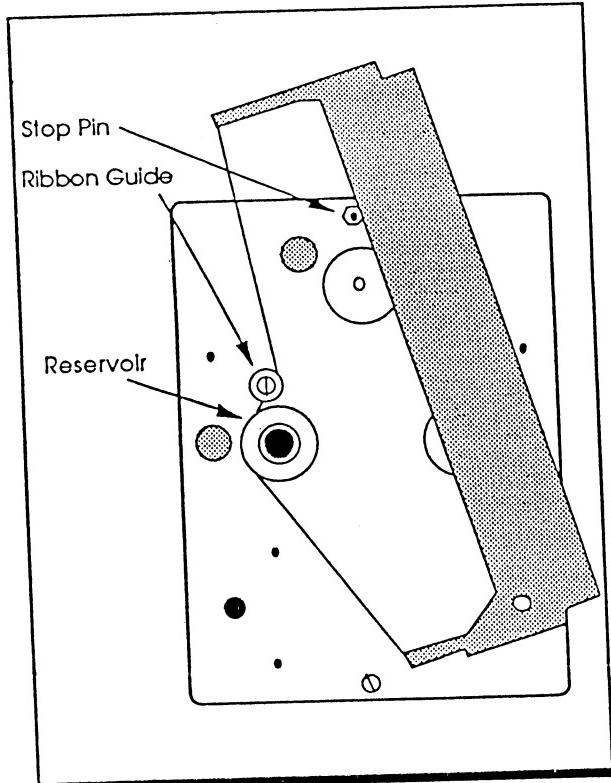
A few weeks later the package arrived. Bewilderment set in as I unwrapped the infernal contraption. This is the ugliest gadget I ever saw. The Epson MacInker is a little 6"x9" platform supported on three legs to a height of 1-1/2", made of thick black plastic. The surface of the platform is pocked with circular depressions, holes and cutouts. Here and there are fastened various screws, nuts and washers you can find in any tank-town hardware store. There is also a small inkwell mounted on top of the platform, and underneath is mounted a small motor with its shaft sticking up through the platform and a wire running out the bottom bearing an inline power switch. The illustration gives you some rough impressions of the MacInk-

er. Guaranteed, you are not going to decorate your living room with this thing!

Macinker in Action

The instructions furnished with the homely contraption are brief but adequate. You start by calibrating your ribbon cart. Mark a little white spot (with white-out or some such) on the ribbon, mount the cartridge on the platform, start a clock, turn on the machine, and time how long it takes for your spot to reappear. My Epson cart took 20 minutes (the little motor runs at one yard/minute). During the calibration run, it's a good idea to adjust the ribbon so the little hole on the side of the inkwell is positioned approximately in the center of the ribbon. You do this by adjusting the O-rings on the outside of the well and the thumb-screw/nut on the ribbon guide. You only have to make these adjustments once.

Then you pour some ink into the well, fire up the contraption again, and start your clock. A thin, very uniform bead of ink is applied to the ribbon as it slides past the hole in the side of the well. In 20 minutes my first Epson cart was done. I was a little concerned: the ink bead seemed so narrow, I was tempted to run it through again. The instructions specifically caution you against doing this and urge you to allow the cart to stand overnight so the applied ink can diffuse into the ribbon. I held my impatience in check and mounted the re-inked cart in my Epson L-1000 the next day.



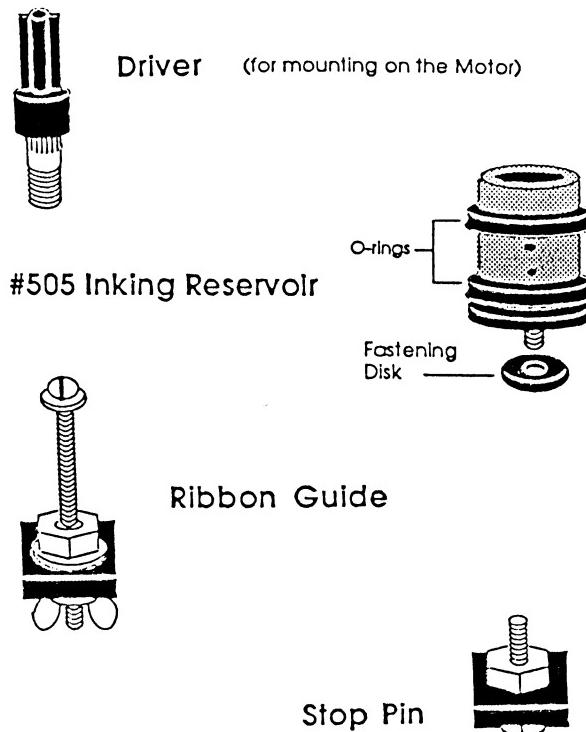
Components of the #271-EP Epson long-cartridge style MacInker
(Computer Friends, Inc.)

The appearance of a test printout elicited a spontaneous chorus of war whoops and wolf howls from the throat of the Alchemist, to the accompaniment of primitive gestures signifying immense satisfaction. The MacInked ribbon performed at least as well as a new cartridge, maybe a smidge better. The ink supplied by Computer Friends is more intensely black than either the original cart or my Guvermint ink. MacInker may be ugly, but it works like a charm.

I've been happily re-inking cartridges now for five months, no sweat. If this sounds like something you'd like to do, too, call Jimmie Moglia at the Computer Friends, Inc. 14250 NW. Science Park Drive, Portland OR 97229 503-626-2291 for info or toll-free 800-547-3303 to place an order. I still can't figure why they call their machine the MacInker; maybe they just chose a dumb name *heh* to accompany an ugly product. This company bills itself as Friends of your Computer, but in my book they are Friends of another kind as well: Friends of the Earth.

Revisited

Since I have ink on the brain this month, I want to mention a few tidbits folks brought to my attention, or that I otherwise overlooked, about the old Atari 1027 printer I railed about in my February column. By the way, I haven't tried this yet, but the ink sold by Computer friends is inexpensive and should work nicely for re-inking 1027 rollers. A discarded nail polish brush (suitably cleansed with acetone or nail



polish remover) works splendidly for applying ink to the little wheel.

Dave Smith of Williamsport, PA wrote in to say that "The ink roller used in the Atari 1027 printer appeared to be identical to the roller in some Dennison pricing guns, as used by retailers to mark price labels. I can no longer remember which model gun but if you can find an office supply store who stocks these, a comparison should be easy." The Alchemist hasn't had time to follow up on that but would be glad to hear from anyone who wants to do a little more digging.

Bob Brodie mentioned the 1027 was a pretty noisy printer. Yup, I quite agree. In fact, I feel that way about *all* impact printers. I failed to mention the standard two-tiered noise abatement treatment I gave to my 1027 and to all my other printers as well. First, I always place printers on a printer cushion. The Rubbermaid DP/WP machine pads, series 1800 ... 1804, work best for acoustic decoupling of any printer (or typewriter) from its supporting surface. I got my pads from MISCO, which has since discontinued them. If anyone knows a current source for these, write! (These pads are also unbeatable for preventing acoustic feedback to turntables in audio systems.) The other thing I do is line the interior of noisy printers with black foam rubber insulation strips, being careful to avoid moving parts, oily areas, and air vents. True, this is a lot of work, and opening the printer case prob-

ably voids your warranty, but it helps. Doing those two things will probably gain you a 3-6dB reduction in noise depending upon printer model and how diligent you are.

A final quirk of the 1027 has to do with the so-called "slip factor" when the 1027 is used with continuous-feed paper. The 1027 has an imprecise friction-feed mechanism designed for a hand-fed single-sheet printer. Power users soon found you could strip the perf from good-quality (20#) laser-cut fanfold paper, attach a small clip or weight to the top of the first printed page to emerge, and convert the 1027 to a continuous-feed printer. Yeah, except that after 2 or 3 pages the bottom of the last page gets printed across the top of the next page, a situation that worsens with each additional page. There's no cure for this problem, but you can reduce it substantially. The fix is to set the PAGE LENGTH parameter in your wordprocessor to a slightly higher number than usual; the exact setting has to be determined experimentally. For example, in *AtariWriter* a setting of page length Y=135 or 136 instead of the usual 132 would typically permit printouts of 6-8 pages in length before the slip factor reared its obnoxious head.

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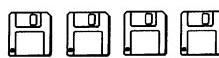


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The Junkyard Pussycat

by John Barnes



Art for Non-Artists

A little while back, in the Atari ST Forum on Delphi, Dana Jacobson, a Boston area enthusiast, called everyone's attention to the collections of clip art published by Dover Books. As readers of this column know full well, the Pussycat is no craftsman with pen and ink. The prospect of a new source of illustrations was enough to send our feline on the prowl to the local book store, a place called "Borders." The friendly lady at the customer service counter (a real plus for this genuine book store) knew exactly what the Pussycat was looking for and pointed him toward several shelves filled with the desired material.

The Pussycat purchased copies of *Old Fashioned Animal Cuts* and *Decorative Frames and Borders*. A subsequent call to Dover Publications in Mineola NY brought a free copy of the *Complete Dover Pictorial Archive Catalog* to the Pussycat's mailbox within a few days. The catalog claims to describe "over 450 books of copyright-free illustrations and designs for artists and craftspeople." Fifty-five new titles were added for the 1990 edition, so this must be a profitable line of business.

Why bother, one might ask, when our public domain libraries contain so many disks of clip art? The answer is quite simple; the material in book form is cheap and it is convenient. The animal cuts book contains 540 illustrations at a price of \$4.50. Scanned onto disks this might occupy 10 megabytes or so (in .IMG format at 300 dpi). In this book the illustrations are printed on only one side of the page, to minimize bleed-through when the picture is scanned in. The decorative frames and borders book contains 396 designs at a price of \$7.95.

What's the catch? The preface to the animal cuts book explains that the illustrations were gathered from 19th century sources, so that much of it has a somewhat archaic appearance, rather like antique woodcuts.

Other books in the series have a 20's or Art Deco look that might be somewhat limited in its appeal.

There is, however, plenty to use for various little DTP projects, and these illustrations would certainly jazz up personal or office correspondence. While the preface states that the material is free of copyright, it appears that this freedom is somewhat limited. It is best to check before incorporating any of the illustrations in anything that is likely to see wide distribution.

Actually using the stuff may present some problems. Some designs (particularly borders) are too big

for a hand scanner to cope with. Cutting and pasting scanned art with a tool like *Touch-Up* is always a tedious proposition. Images scanned at full resolution tend to take up a lot of disk space.

The best results may be obtained by scanning the illustration, clipping out the desired piece using *Touch-Up* or *MVG*, saving the clip area, and importing it into *Calamus*, *PageStream*, or *Publisher ST*. The clip can then be resized, printed out, and scanned in at the desired size. Any irregularities can then be touched up with any of the tools for manipulating .IMG files. It may be necessary to experiment with the contrast setting on the scanner. In cases where other designs show through the paper, it might be smart to put some black construction paper behind the page when scanning.

A little pen and ink work before rescanning might also improve the appearance of a figure. A sharp Xacto knife and some rubber cement might be useful in reworking or combining figures.

New Face in the Junkyard

This month's Pussycat illustration got a minimal going over in *Touch-Up* to soften some of the dark areas and to accent a couple of the whiskers. More extensive processing is possible for those who have the patience.

All in all, the Dover pictorial archive looks like a nice, relatively cheap, source of illustrations. The range of material is so broad as to defy cataloguing. Unfortunately, Dover does not accept phone or credit card orders. Payment in U.S. funds must accompany an order. They will send catalogs following a telephone request. Their mail address is Dover Publications Inc, 31 East 2nd St, Mineola, NY, 11501.

An Atari in the Service Bay?

The next time you take your automobile in for repairs, you might notice a familiar grey monochrome monitor parked near the service desk. Next to it you will find a big grey box with an attached mouse. Some 1,500 garages around the country sport these installations, which are produced by a company named ALL-DATA, that has repackaged a 1040 ST, a CD-ROM drive, and a thermal printer into a closed system to help local repair shops diagnose and repair ailments on a wide variety of automobiles.

The CD-ROM drive is used to access a library of disks that contain repair and diagnostic procedures, wiring diagrams and service bulletins. By September, the company expects to have complete data for models ranging from Accords to Yugos covering the period from 1982 on. The mouse is used to navigate through a set of menu selections that identify areas of concern for the various makes and models. Once a relevant page is spotted it can be output to hard copy from the thermal printer. The databases contain text and graph-

ics. A team of 40 ALLDATA employees is totally occupied with data capture and indexing. The compression and indexing methods are proprietary, and there is no fancy hypertext. The price for hardware and data ranges from \$8,500 to \$15,000 depending on the options chosen. There is also a yearly subscription fee to maintain an up-to-date library.

The distributor local to the mid-Atlantic region brought a couple of units to a recent AURA meeting in Kensington, MD. One repair shop operator had gotten curious about what was under the hood of the machine in his shop and had made contact with his local user group. After a bit of poking and prodding the local experts decided that the machine was pretty much a closed system, but a check with ALLDATA proves otherwise. The software to drive the CD-ROM and the thermal printer are both proprietary, so that ordinary Atari applications may not run on the machine, although it is described as an open system. The people present did not dig deep enough to discover where the DMA bus connection, the parallel printer port, or the serial port had been hidden. There is a floppy drive and it might be possible to load small programs that way. But you can attach a modem and a hard drive, and a printer with minimal modification, according to ALLDATA.

An optional package named "Telepart" allows the repair facility to dial into computers maintained by parts jobbers, identify the parts needed, and place an order. This part of the operation uses the keyboard. The hardware and software for the jobber side of this business is supplied by a firm named Triad Systems, which has been working on the problem for quite a long time with considerable success.

According to Arthur Gold, ALLDATA's director of marketing, the introduction of microprocessors into automobiles has made diagnosis and repair a much more complex art form. Trained users of the knowledge base provided by the ALLDATA system should be able to minimize false starts, thereby saving themselves and perhaps their customers time and money. ALLDATA expects to more than double their installed base by March of 1992. Sales results for the year ended in March of 1991 showed a gross of over \$10 million. ALLDATA started up in 1986 and their first systems were shipped in 1988.

The beauty of this system, in the Pussycat's eyes, lies in the fact that someone has actually seized the initiative to put together a special purpose system that is well adapted to a technology that Atari introduced ahead of its time, but without any follow-up. 1,500 sys-



tems may not be a lot, but, at \$10,000 a pop, it adds up to \$15 million. That is a prospect that is easily worth the sweat of a number of people. There is also a lot of room for expansion in this market. It seems safe to say that there are more CD-ROM drives (although I did not find out just whose they are) installed in these machines than there are in the rest of the Atari user base.

This is clearly a "niche" application. Keeping the system simple makes it easy to use. The data has high added value because a repair shop may be able to point out additional work that the vehicle owner may wish to undertake. A printed document outlining a service problem that the owner may not have been aware of may be fairly convincing. The shop owner also saves valuable time by providing his mechanics with access to reliable information in a convenient form. The investment is, however, a substantial one, particularly for the small independent shops that might find it most useful.

Best wishes to ALLDATA in their efforts to make life better for auto owners and mechanics alike through the application of Atari technology. Any Atari fans who happen to be in the auto repair business may wish to check with ALLDATA corporation at 9412 Big Horn Blvd, Elk Grove, CA, 95758. Their phone number is 916-684-5200.

To Quote or Not to Quote?

Several weeks ago some of the GEnie denizens brewed up a tempest in a teapot over the issue of re-publication of messages that had been posted to one of the topics on the GEnie ST Roundtable. As a result of this incident a new policy was implemented whereby individuals can attempt to control the way in which their messages can be quoted outside the service.

While the Pussycat is not in the habit of using other people's words to overcome his monthly writer's block, the events and the issues they raise do serve to remind us that we should not say things in public unless we mean them to be taken seriously.

Defamatory or slanderous allegations made in a public forum can be used as grounds for action to seek redress. This is one reason why editors exist to ride herd on print journalists. The facts behind any allegations must be independently verifiable and the sources for those facts must be available (except to the extent permitted by so-called "shield" laws) to anyone who needs them. Historians must use footnotes, journalists have to be prepared to answer questions about their sources. Better adherence to these principles by non-journalists would do much to improve the discourse on local as well as national electronic bulletin boards. Too often we find that the discussion takes on the tone of a partly-line telephone conversation, wherein gossip and supposition are bandied about freely. Remember that message postings, even in electronic forums, take on a measure of permanence. They may be reread months after they are posted, by which time the context of the discussion will have all but disappeared.

Of course, we must also remember that entities like GEnie are businesses. They have to look after their own interests, as in the recent notorious case of the Prodigy mail. GEnie's policy guidelines clearly indicate that they feel that the material in their databases and file libraries is copyrighted and may not be reused without permission. It is less clear that the material posted on the bulletin boards is in the same category. The policy for republication of text from the ST Roundtable appears to be grounded in the reasonable premise that such use of the material is permissible, provided that proper attribution is provided. The requirement that such republication be accompanied by a commercial for GEnie should effectively prevent verbatim quotes from message postings. The requirement for proper identification of the category and topic from which the posting is extracted serves to allow everyone access to the same sources.

The additional provision allowing a member of the GEnie ST Roundtable to proscribe republication of their postings appears to have less merit. For example, if someone accuses (or even appears to accuse) someone else of using illicit means to create a product that might infringe the copyright of another product, that allegation is news. There is no way the maker of the allegation can cover up the fact that it has been made. The allegation must stand until the maker recants or the matter is resolved in another way.

Such allegations, and others of the same ilk, should not be made until the maker is sure of his facts and is prepared to share the data with everyone. Allegations at second and third hand ("a little bird told me") are not acceptable. Codewords like "prominent

official," "unnamed source," and "usually reliable source" are offensive and should be licensed for use by registered journalists only. Fortunately, only three members of the ST Roundtable have chosen to avail themselves of the protection afforded by the opportunity to publish notices screening themselves from quotation, so that we can expect business to go on pretty much as usual.

Documentation regarding GEnie's republication policy can be found in GEnie's overall policy guidelines (*POLICY) and in topics 12 and 20 of category 1 on the ST Roundtable. Topic 7 of category 18 is a somewhat less than illuminating discussion of the issues involved.

People who quote material from the GEnie Roundtables on bulletin boards or other media should protect themselves by reading this information. Meanwhile, this part-time journalist hereby serves notice that those who publish newsworthy material are fair game for attribution regardless of where they publish it.

Readers who wish to respond to any of the material in this column may send paper mail to the *Current Notes* editorial office as listed inside the magazine. Electronic mail can be sent to:

J.D.BARNES (GEnie), JDBARNES (Delphi), or
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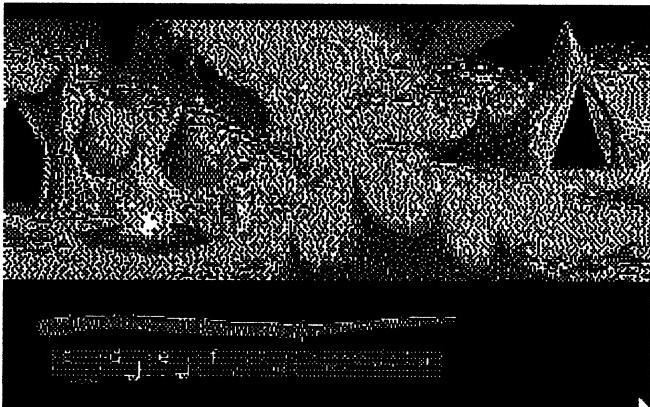
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STARTING BLOCK

by Richard Gunter

Loom and Hero's Quest



My gaming taste tends to the more advanced fantasy role-playing games (FRPGs) having lots of swords and sorcery and complex puzzles. Lately, real-life dragons have sapped the energy available for such things. I found two games recently that were a relaxing change, though.

Loom

Loom, from Lucasfilm Games, comes on two floppy disks packaged with a "Book of Patterns," a brief instruction manual, a reference card, and an audio cassette tape recorded in Dolby stereo. The tape describes the *Loom* universe and provides some useful background information. *Loom* is easily installed on a hard drive--the recommended method for faster play. It gets along with TOS 1.4 and *Hotwire*; I made a hot key for it and had no problems, although I boot without my usual accessories and autorun programs.

The game is not copy-protected. The protection scheme comes into action each time you load or restart the game. You have to look up a randomly chosen musical note sequence in the "Book of Patterns" (using the red viewer to make the notes readable), and click on the correct four notes in sequence. The game save/load feature is governed by a function key and works without hassle.

Bobbin's World and Magic

You play the role of Bobbin, a young member of the Weavers' Guild. Seems that in this world Weavers can do more than weave fabric--they're magicians as well. The magic system is unique; spells are "woven" by musical notes, with the aid of a staff called a "dis-

taff." At first you can't do much, but as you progress, you gain enough experience to use higher notes which you use to weave more advanced spells, or "threads."

Each time you play, most spells are randomized, so records of a previous game won't help much. Main interest on replay is to try a higher level of difficulty, where fewer visual aids are provided as you learn and use magic.

The artwork is beautifully executed. You have a camera's eye view of a scene and move Bobbin around the scene with the mouse. In each scene there are exit points which bring up a new scene--a common method for this type of presentation. Scene changes are comfortably quick.

In many scenes, conversations are presented by "cuts" to a closeup of the character who's speaking, and his/her image is animated with blinking eyes, and such. Animation is exceptionally smooth throughout, giving one the sense that cinematographer's skills have been applied here.

Playing a Movie

When I mentioned the game to another CN author, his immediate reply was "You don't play *Loom*; you watch *Loom*."

There's considerable truth in that statement. Most cut scenes are forced; you don't have any options except to sit back and watch, or hit a key to skip the cut altogether.

You can't die in this game, and the puzzles are all pretty simple. In fact, it's frequently difficult to proceed without taking an action which is essential to completing the game. The general effect is that of watching a filmed story unfold, with limited freedom in what you can do at a given stage. This shouldn't be a surprise; the manual tells you as much right up front.

Recommendation

At first I was unsure whether to recommend this game or not. On the down side, it is a short, easy play. I completed it in about three sessions, none of which were lengthy. Compared to most FRPGs, there is virtually no violence to attract gamesters who enjoy slaying monsters. (This is either a plus or a minus, depending on your taste). Artwork and animation are superb, and the magic system is refreshingly unique. With these stipulations, I give *Loom* a thumbs-up.

So You Want To Be A Hero [score 1 of 500]

"I am Sheriff Schultz Meistersson. This is Otto Von Goon, my assistant. What do you call yourself?"



Hero's Quest

Hero's Quest from Sierra is the only program I've ever purchased because of the package blurb. The cover art depicts a dragon-like monster with shreds of metal dropping from its fangy mouth, and a half-eaten shield on the ground before it. Facing this monster is Our Hero, holding a bent and twisted sword. Below is the legend "So you want to be a hero."

The back of the box explains that you are a graduate of the Famous Adventurers' Correspondence School, and qualified to "battle brigands, massacre monsters, and rescue royalty." Riiight. Sure you are. Ok, the humor is kinda silly, sarcastic, even smart-alecky. Just my style.

The Package

Hero's Quest comes on four double-sided disks, and installs easily on a hard drive (just copy the files into a single folder, ignoring the "name conflict" messages). The game works with TOS 1.4, but does NOT like *Hotwire*, and you must be in low resolution before you run it. If you have a synthesizer, you can configure to play sound effects through the synthesizer.

Note: hard drive installation is definitely the way to go; the game has something like 2.7 Mbytes of program and data--you'd get dreadfully tired of swapping floppies.

Packaged with the disks are a technical manual and reference card, and a Famous Adventurers' Correspondence School manual. (Read the manual. The sophomore humor continues).

The World of Spielburg

The world of *Hero's Quest* is restricted to the town of Spielburg and the surrounding valley. You can draw a map if you want, but you really don't need to bother.

Your character is created in a standard manner. There's a choice of three professions: fighter, magic user, and thief. Having chosen a profession, you're given a budget of 50 points that you can allocate as you wish to a set of skills. Crossover is allowed; that

is, a fighter can be given magic user or thief talents, but five points in each crossover skill cost you 15 points of your budget.

Here again you have a camera's-eye view of a 3-D scene. Artwork is good, although not as exquisite as *Loom*. You can control your character's movements with either the mouse or the keyboard. Each scene has exit points to a neighboring scene. Scene changes are slow, requiring several seconds even when playing from a hard drive.

Combat

You can die in this game, frequently. Fortunately, the save/restore feature is easy to use and rebooting is not required.

Monsters appear randomly as you wander the countryside. Species and general level of nastiness vary as the game progresses, and the worst of the random monsters appear at night.

Combat occurs on a closeup screen which shows your hero as seen from behind and a front view of the monster. Using the keypad, you can dodge, block, or attack. The game sort of helps (?) with these actions. Early on, your character is pretty unresponsive. As he/she gains experience, your hero gets more lively. The combat system takes some getting used to and I've played systems that are more comfortable. The monsters are well-drawn and animated.

Missions

There are several missions you can attempt (see the notices posted in the Adventurers' Guild hall). Some are sources of funds, and others are necessary to complete the game. You'll need money to buy potions (want to heal up, don't you?), food and armor. The only available armor is chain, and the only weapons you can buy are extra daggers. Each character profession comes with a basic set of equipment and weaponry.

Puzzles are not difficult. Each character profession must use a different method for solving some of the puzzles, which makes the game flow differently for a fighter than for a thief. There are also some sections of the game that are blocked from each profession. A fighter can't get into the Thieves Guild, for instance.

Recommendation

If Sierra's brand of humor is to your taste, it adds enjoyment to the game. Variations in puzzle-solving tactics make replay more fun than is usual. The time and effort needed to reach necessary levels of experience and acquire funds is not too onerous. A relatively easy game, suitable for novice gamesters and those looking for a change of pace. I enjoyed it.

Next time: an in-depth review of *Informer II*, a database program with some interesting features.



Hey -- Like, DB, Man!

(C) 1991 David C. Troy

The primary reason that I decided to take a break from Johns Hopkins last semester was that I wanted to complete some heavy projects for my business. One project I have been working on for about a month, and now have running in a preliminary form, is a heavy-duty, point-of-sale, cash-register, mailing-list, order-tracking, accounts payable and receivable tracking, balance-sheet-producing, there's-nothing-it-can't-do-(in-theory) system. It is possible to produce such a system on the ST that runs at reasonable speeds and doesn't require that you write your own database-management routines from scratch. I have had the most enjoyable time programming in *dBMAN*.

The Mailing List Evolved

Before I get into how this thing works, I'll tell you why the need for it became apparent. When we here at Toad Computers first started out, we had a mailing list and it was made up of three components. First, we had a text file of names, generated by our 130XE-based receipt printer and rudimentary point-of-sale system. We also had a listing of names generated by our bulletin board system. As time went on, we got some names from *START* magazine on disk. People called and asked if we would put them on the mailing list. We were sending out propaganda to approximately 1,500 people in mid-1989, using unsorted labels from three or more sources, all of which had to be manually attached to flyers, then manually sorted, counted, and mailed.

So, towards the end of 1989 I began a quest which is only now becoming resolved. It was to figure out a way to have a big, accurate mailing list, in which we could keep addresses and statistics for all of our customers. In my view, direct-mail would become our advertising method of choice, and to do it well, we'd need a good fast system that would keep accuracy up, allow selection of certain market groups, and thus keep mailing costs down.

My theory is that the circulation of magazines like *START* and *ST-Log* (which have traditionally had the highest circulation numbers) has basically dwindled away. What hasn't disappeared is the Atari computers (see *Conservation of Mass*, High School Physics). So traditional print advertising in such magazines

as *START* or *Current Notes* may only reach 10% of the people who might be inclined to purchase something from you. Granted those folks are your best bets, and advertising to that 10% is definitely worthwhile, but cultivating bigger numbers and increasing the size of that 10% is where the long-term big money lies and it is the only way to insure the health of the Atari marketplace in the long run.

In fact, direct mail has become my advertising method of choice. While mailing does require a little more initial cash outlay than print ads, it's worth it. Someone who may not have purchased an Atari related magazine in three years might be thrilled to receive a nice ad from what he may think is the last place on planet Earth selling Atari equipment. Your mailing efforts are cumulative. By the time a customer has received a third piece from you, you seem like an old friend. You build a regular following that way, and you maintain customers who might otherwise be tempted by the evil fruit of the 386. So anyway, it works. I encourage other companies to compete with mine via direct mail--because it is the only way we can maintain this otherwise-shrinking market.

After building a large and reasonably accurate database of names, I sought to put it into a program that would allow me to manage it easily. I have previously mentioned that *Superbase Professional* was my first try. While I didn't have everything transferred into it, I found it to be slow and generally goofy. I then transferred everything I had into *dBMAN* version 5.2. Without using any programming to speak of, I printed labels for my first mailing with them ALL sorted! ALL in a consistent format! What a joy to stick on those labels and be able to bundle up my flyers without having to resort them! That was nice, and I was hooked.

As of December 1990 I had nearly 50,000 names on file, and it seemed a shame to go on, day after day, entering in orders and not utilizing the vast supply of names I already had. By re-entering addresses, I'd formed a breeding ground for inaccuracies and duplication. When someone called to place an order, how nice it would be to repair their old, inaccurate address--or call up their most recent shipping address. And there was no reason that I couldn't do this.

I dabbled more and more in *dBMAN* programming, making increasingly more advanced utilities for mailing list maintenance. Finally, I decided that there had to be a way to write a decent do-it-all system using *dBMAN*, but being unfamiliar with everything it could do, I solicited some assistance. I created specs for my program, based primarily on the fact that an order should be some relation between a record in the mailing list database and some items in the inventory database, and then went from there. I found someone who could write a program (using a *dBASE III+*-compatible program on an IBM) to my specs, and he did. Only I realized that my specs were too loose.

Writing Dream-Code

I basically ended up re-writing the program from scratch, but I also wrote it as ergonomically and as completely as I could. And the rewrite process gave me the opportunity to learn *dBASE* programming inside and out. The result is a smooth system, that finds a customer quickly and easily using one of several possible search criteria, allows full screen editing of an order, and then allows editing of an order after it is saved. By saving all the information about each order, it is possible to have access to a full array of statistics. Sales tax reports become a breeze. The computer can just look through and tell you how much sales tax you collected, what your taxable sales total was, what your non-taxable sales total was, what your profit was, what the profit was on stuff you haven't told it how much you pay for yet (based on the margin on the stuff it knows) ad infinitum. The biggest key to having control over your business is having vital information about it. The easiest way to obtain that information is to have a solid base of information that contains every transaction you conduct, and then formulate simple operations you can perform on that information which answer the questions you have.

The nice thing about using *dBMAN* over something like C or Pascal is that you've got a whole library of really nice functions which take care of stuff like indexing, searching, sorting, menus, screen operations, using multiple databases, and a jillion other things, which make *dBMAN* really nice to use for this sort of program. Certainly, a library of functions for either of these languages would take care of that problem, but I don't know of any such thing for the ST, and *dBMAN* delivers satisfactory performance and, most importantly, does not require the super-technical task of writing and debugging four hundred routines.

Just to give an example of the kind of luxuries *dBMAN* and *dBASE*-compatible systems on other machines offer, suppose that I want to find the name "Bob Albinar" (fictional character) in a database of 50,000 people. With *dBMAN*, you SET your INDEX to LASTNAME, and tell it to FIND "ALBINAR." Within about two seconds (on a hard drive), you're

pointing directly at this person's record. Using a home-made system, you'd have to worry about the physical details of the B-Tree search algorithm *dBMAN* uses, and hope that you've written a functional equivalent to what *dBMAN* actually does. While I am technically capable of writing such a program, I prefer not to. I don't have time, and the more routines I write, the more bugs there are.

My system is now in its second week of operation. I have found several bugs. For a while, it would mysteriously sell to people items that they had not purchased. Sometimes the system would refuse to take an order for certain customers. I have since eliminated those bugs, and the more I use it, the more potential I see it has, and the more bugs get eliminated.

Other POS Systems

I have looked at other systems, most notably at CRICIT from Nice & Software. I like that program, and it has some functions my program doesn't, but my program handles customer searching in a much more savory fashion. I wrote it that way to suit my needs. CRICIT will handle a bar-code reader, mine won't (at least right now). Mostly, I just couldn't swallow doing things the way someone else wanted me to, and I am quite happy with my program as is.

Disadvantages

There are some disadvantages to my system. In its present form, it is a bit slow. I am running interpreted *dBMAN* code. A compiler is included with the package, but I have not run it as I have been modifying my code a lot and do not want to recompile it each time. To bring the system up to speed I have coupled it with a FAST Technologies T-16 board and a Toadfile 44. You wouldn't want it to run any slower than it does now. That's not to say it's slow, but you just wouldn't want it any slower.

Laser Blues

Since my article about laser printing came out in April, I've had a lot of people call me about how incredibly slow laser printing to printers besides the Atari SLM series can be. Well, all I have to say to that is "Yeah." It's true. The Atari SLM series printers are incredibly fast, and they increase productivity as a result.

1040STE's, Medium Rare

The Atari 1040STE, when it came out last year, was not capable of booting in medium resolution. Bob Brodie and other high priests at Atari promised that they would ship with a "fixed" version of TOS, that did allow booting in medium resolution. That TOS was to be version 1.62. I had not seen it until this week, because no machines had shipped with that TOS until now. The 1040STE will successfully boot in

medium resolution now. But not all of the machines I received included 1.62. By the time you read this, though, all 1040STE's will probably include it.

Jerry Pournelle Bytes the TT

In the most recent *Byte* magazine, Jerry Pournelle did a quick review on the TT. I was not impressed with the review, not because it was unfavorable--it was rather favorable and left the reader with the impression that the TT was something like Cool Whip (fatty, bad for you, but awfully sweet)--but largely because he seemed to expend very little effort to determine what the machine could actually do! Jerry thought the machine took so long to boot up because it was running diagnostic tests. For those of you who don't know, it has a 90 second boot delay when you turn the machine on which allows the hard disk to come up to speed. This boot delay can be exited at any time with a keypress. A one second glance at the manual would have informed Jerry of this feature and spared knowledgeable readers of four or five long, stupid, embarrassing (for Jerry) sentences hypothesizing the reason for this long, Pournelle-inexplicable delay. Then, when he wanted to test the thing, he couldn't find *Sundog* (an ancient game that probably wouldn't run on the TT). So he ran *Tracker ST* on it, a competent but rudimentary mailing list manager which is not a good display of the TT's abilities. What about *DynaCadd*, *Calamus*, *PageStream*, or even *dbMAN*? Perhaps some blame is to be placed on Atari, for not providing really powerful software for him to review. But regardless of who's to blame, the damage has been done, and another shot Atari had at the mainstream has been blown by simple ignorance. Incidentally, by the time you read this, TT's as well as the 19" monochrome monitor (which Jerry mistakenly said was greyscale), and the 14" color monitor should be available. And Jerry also said that a standard 14" multisync monitor wouldn't run because the screen flicker was too great. I have *only* seen TT's running on multisyncs. I have not seen the new Atari monitor. And the TT's ran on multisyncs just fine.

A Real Mystery

I named this column Myths and Mysteries because my inspiration for writing has been to clear up misconceptions and answer questions that seem common to me. Well, this time I have a case for y'all to solve. An Atari owner, going by the name CT. (Carl Thomas) Moore, a black man about 6', claiming to be a graduate student at the Univ. of Maryland, with addresses in Maryland, New Jersey, and Massachusetts, is wanted by the Maryland State Police and the FBI. He currently owns a Mega STE. If you have any information that may lead to his arrest, please call or write and I will pass the information along to them. A reward may be offered.

Next Time

In my next installment, I hope to be reviewing *PageStream 2.1*. This program has not yet been released, but I hope to be receiving a beta copy for review. For those of you who are not aware of what the new version will do, features include the ability to use PostScript Type 1 fonts for both screen and printer and the ability to use and display encapsulated PostScript graphics. This is quite nice. You may recall my article from a few months ago where I talked about converting from Type 1 fonts to *Calamus* fonts, etc. Well now, *PageStream* will give you direct access to thousands of high quality commercial and public domain fonts which are already available. That is real power and I fully expect that *PageStream 2.1*, with its color abilities and PostScript compatibilities, will be an even more serious competitor to Aldus *Pagemaker* and *Quark Express* on the Mac and IBM platforms than it has in the past.

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Publisher's Luncheon

When a Desk Is Not a Home

By the Former Owner



Publisher

Sign on the Door

The front door at high noon had a message on it. It read:

Perestroika Time
Team A vs Team B
Winners' Prize
Ready? Willing? Able!

Another Publisher's Luncheon was scheduled for that very day. A monthly occasion, usually at the ST Editor's home, its purpose was to give nearby CN authors a chance to tell the Publisher what they thought about his final "layout" of theirs and others' material. And now and then, to toss a bit of "praise" into the convivial air for the results of almost a hundred hours of work by the renowned Waters Team, with the "Him & Her" wax on their fingers, as they



Barnes & Elmore Inspecting

raced the clock, late into the night, to paste up all 84 pages and rocket it off to the printers the very next morning.

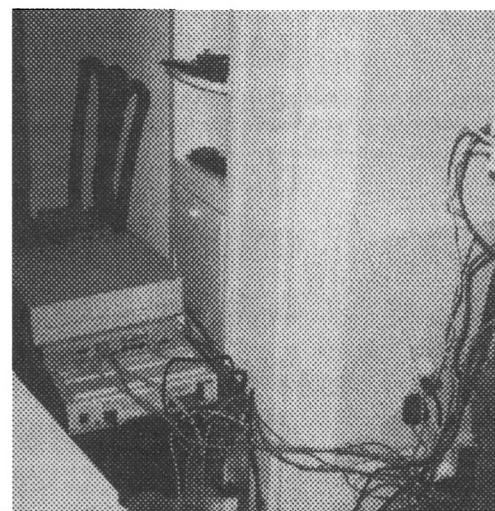
But these were sober, sophisticated individuals who had "hammered" their way thru life without receiving much adulation, so why should the Publisher, who always rushed in late to the lunch with the first dozen copies of the magazine under his arm, why should he be given any particular praise?

Besides, the group was talent tall in heavy oral output and hors d'ouevres intake. So they sipped their drinks and, between shouts, furled the pages of the magazine, pausing always to scan their own article first. The Publisher, no stone-statue mouth himself, at these sessions usually sat in his listening mode, waiting for a salient observation or a short encomium, if fortune so ordered it. More could not be hoped for and seldom came.

But this particular "gourmet gobble" had been rigged to be "different." For several years now, the arrivees would surge first into the den, or "electric force field" as they dubbed it. There they delivered boringly repetitive snideries about the "leaning tower of Sommers," the tiny discount store desk piled to the ceiling, as it were, with computer paraphenalia, and color, and Moniterm, and monochrome monitors. And prophesies about the date and hour it would separate and crash, taking its editor into oblivion with it, were all part of the stylized humor. This time, as they entered they were handed a

drink and assigned either to the A-TEAM (hutch construction in the living room), or the B-Team (full desk erection on the porch.) Oh, yes, a large heavy mahogany surfaced, put-it-together-if-you can edifice had arrived in several boxes.

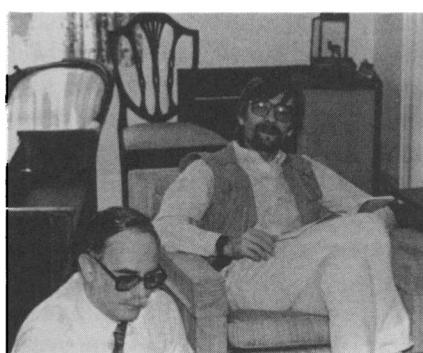
Starting times were duly noted, along with a warning of five minutes added for each left over part. Grumble? No, no. Just a lot of complaining and hoots of anguish as they traded insults and worked away. Gunter, the "Starting Block" web spinner and Wrotniak, whose



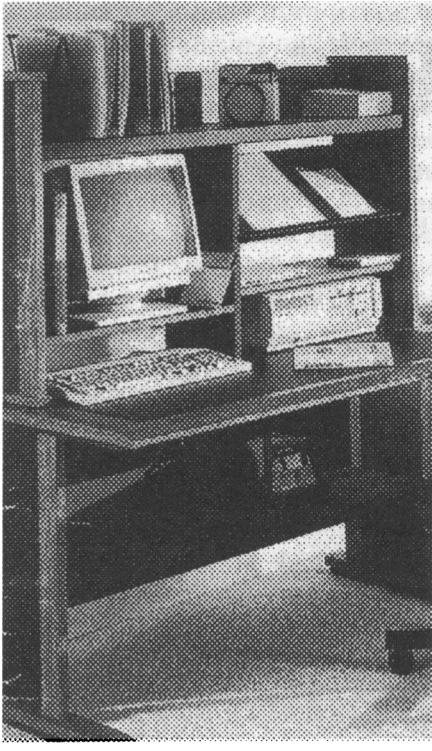
acid pen could etch glass, worked the hutch, while the porch rang with the complaints of Van Wyck, a just-that-day, retired radar academician, and Elmore, of Panama and Noreiga fame.

They all had been told that, in addition to finishing first, they would be judged on how well they worked together and who showed initiative and who obstructed--typical assessment procedures for the Publisher's real work habitat.

Those not teamed up, e.g. the Publisher and the "Junkyard Pussycat," wolfed appetizers and



Gunther of Starting Block & Wrotniak of ST ToolBox Fame



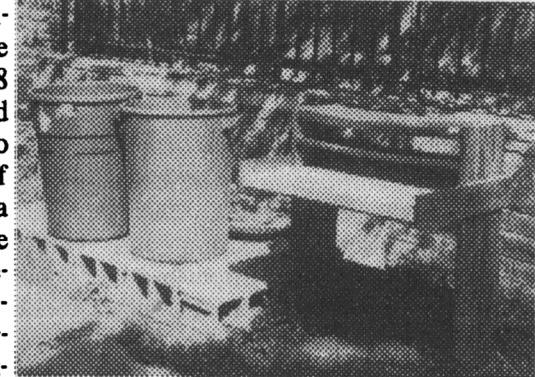
criticized their fellow authors at work. In sum, you could see why this magazine had the reputation it did, as you watched this small microcosm of all of CN's authors strut their stuff.

Then it crashed, much as computers do. The Hutch Team was finished and the Desk Team pleaded "no contest" because one of the leg joints to the desk was missing! Lacking a Star Trek "beam it down" from Busch Industries, we halted the project and announced lunch. What you see in these pictures is the 128 minute effort of Elmore and the new desk's owner, two days later, after the arrival of the errant part. Elmore, a one-man triumph in the desk's final assembly, thereupon turned into a megaphone of advice and encouragement to his host, as the lat-

ter tried to find out where the tangled nest of wires had had their homes.

And what about the little desk that couldn't? Did it go to the CN Memorial Museum or with the garbage to a furniture graveyard? Instead to the curbside, where with a sign on it, saying "I'm a good desk.

Take me, if you need me," it languished 'til mid afternoon, when returning school children quickly effected its adoption.





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June 1991

Current Notes

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by: David Small, Copyright 1991

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Introduction

I've always liked, and believed, in magic. I never went through that stage called "growing up" about it. And while I could pull the usual Dave Small ramble about why that was, let's just cut to the chase and say, it's a darn good thing.

There's something about the attitude of believing that, despite what anyone says, something *could* happen, which is very important in any sort of creativity. Magic perfectly shows that attitude; you know there's no rabbit in that hat, for instance. Yet it appears.

I get such a kick out of demonstrating the Spectre GCR at shows to people who have never seen it, particularly to rabid Mac owners. I run the program, get into the configuration menus, set everything up, and press [Return] to start it up.

And for a few seconds, nothing seems to happen. The screen stays put and it looks like the program has crashed. Now, in reality, things are furiously happening inside the computer, but you couldn't tell by looking at the machine.

The seconds stretch out, and the suspense gets a little agonizing for me. Did it crash? (I've seen Spectre crash more than anyone else in the world, remember, often at this spot, and sometimes during demos...)

Then, *poof*. Rabbit out of a hat time. Screen fades, and a little Mac fades in, smiles, and the screen says, "Welcome to Macintosh." A few seconds later, it's up and running the Mac desktop.

I just love the expression in the audience's face. It's magic, you see.

(About half of them quietly look for cables leading under the ta-

ble, to some hidden Mac. I know Jerry Pournelle sure as heck did the first time I showed it to him.)

Mac emulation's been around since January 1986, which makes it more than five years old. As the program grew up, it got harder and harder to crash. The critical point was the zero-store handler; many Mac programs write into ROM, which crashes the ST. The Motorola books said that the 68000 cannot recover from this; that's why there's a 68010 chip. And the most magical part of Spectre is where it picks the 68000 up off the floor, dusts it off, starts it ticking again, and cures the program on the spot. To me it becomes magic when the designers of the chip say it's impossible; I had to un-learn what their manual said and give it a try anyway.

We nicknamed the Zerostore handler "Zeus" because of this. Zeus became the difference between a half-emulator and a really stable product.

(How does it work? Awww, come on, watching a magician show how a trick works is dull... but if you're really hacker hearted, note the intense similarity between the "IR" register, stacked up during the crash, and the program instruction that swatted you down. It all starts there.)

The next most fun thing is watching a Mac user plug some Mac program I've never seen into the Spectre. I'm a little tense, too--what if it crashes? But, honestly, stuff I haven't seen works about 95% of the time anymore, and the rest, I can point to the exact coding problem in the program and tell them why it breaks, from the infor-

mation I print out during a crash. "Hey, what's the program doing accessing the SCSI chip directly? Is it begging to crash, or what? Apple says you're not supposed to do that, and it'll break on a Portable or a IIfx."

But look at what's important: I'm trusting the magic inside the program, particularly Zeus, when they put the disk in. See? Instead of programming it, I'm now using it myself!

I'm a real believer in magic with computers. I like doing things with the computer that closely resemble magic. I like it a lot. In college, I survived only by doing independent studies in addition to stuff like Sadistics 101 (Statistics); the independent studies were Mainframe Magic. I studied real interesting stuff like CDC assembly language, PPU calls, how to interrupt a Fortran compile to leave a copy of the entire system in a file for me to peruse (my, my, there are interesting things there!)--and in a real burst of hacking, how to talk to the innards of the computer directly.

I remember whipping up a program to let any number of users (max 32) talk to each other at once. I ran it on four terminals for a test in a busy student computer center. And for some reason, the program pretty well took over the computer. (I've since figured out that the scheduler "preferred" small, disk-bound programs like mine over almost anything else.) As I typed messages back and forth, I noticed the center had become deathly quiet; the noisy line printer in the next room had stopped, and the DecWriter's had stopped their scree-screeing sound.

I turned around from testing to find people watching me, since my terminals were the only ones doing anything. I managed to look innocent long enough to shut down the terminal program, at which point everything sprang back to life--line printers, Decwriter, and so on. And then I exited stage-left before some Computer Center Security type showed up.

The CDC manuals indicate that these results are impossible under TELEX, the time-sharing executive job for the Cyber. I know different.

Magic

I guess one definition is when the crowd has no idea how you did it, and knows, in their heart, it's impossible--and it happens anyway.

And now I work on these Atari ST and TT machines, and there's real magic potential in there that's new, barely, barely tapped.

It's called an MMU. And I've been working with it to pull some real magic stunts recently, which "everyone knows" are impossible.

So what's an MMU, you ask? It's a Memory Management Unit. Basically, in the 68030 chip, Motorola rolled together the 68020 and the 68851 MMU chip so there would be an MMU onboard.

An MMU is a hardware device that splits apart "logical" from "physical" addresses, and lets you link any of the one to any of the other. A translation, sort of.

Now, let's translate that into English. (I guess I'm playing MMU). Inside your computer, you have up to 4 million characters ("bytes") of memory, each one with its own address, just like a street address: 1, 2, 3, 4. ... up to, 4,000,000. Your program loads somewhere into those addresses, and uses them for data storage. Even what's on your video display is stored in there, taking up 32,000 locations.

Those physical locations, located inside your RAM chips, are called "physical addresses." For in-

stance, if I ask for the contents of location #1, I get the data from memory byte #1 as opposed to #2.

Programs use "logical addresses." This is sort of the same thing in that logical addresses are memory that the program knows about. On the regular ST, logical addresses are the same as physical addresses; if a program asks for #1, it gets #1, period. This is because the ST has no MMU in it; it uses a 68000 processor.

Okay, let's go to the 68030 and see what we can do.

The MMU makes it possible to totally disconnect "logical" from "physical" addresses, making a program think it is using an area of memory that it simply is not.

With the MMU, programs can be deceived into thinking that they own the entire machine, when they really don't. Here's how it works. We split memory up into "partitions" with the MMU. We assign program #1 memory from 1 to 1 million, program #2 memory from 1 million to 2 million, and so forth, for 4 partitions. Now, when program #1 asks for memory location 10, it gets physical location 10, because the MMU knows its starting place is 1. If a program in partition #2 asks for memory location 10, something very different happens. The MMU says, "Hmmm." (I don't know why I always say that computer chips say "Hmmm.") It says, "Partition 2 starts at 1 million. So, let's add 1 million to that address #10, and get #1,000,010. And that's what program #2 gets, rather than #10.

Program 2 is utterly unaware that it isn't getting the real location 10. Furthermore, it doesn't matter! Because every location has been "mapped," or moved, the program runs just fine, just in a different section of memory than it thinks it's in.

If program #1 attempts to stomp into any other program's partition, the MMU catches it, throws a penalty flag, declares a bus error, and stops it.

Now, let's get really clever. Let's set up a ticker which, out of every four seconds, sets the 68030 to running whatever program is in partition 1 for one second, partition 2 for one second, and so forth, round robin. The ticker will interrupt and halt any running task to do this inside a partition, and can restart it from where it left off. This is called "pre-emptive multitasking." The computer is "sort of" doing four things "at once," and the programs don't have any choice of when they get halted or started; they get "pre-empted."

Now, in real life, multitasking operates at a much higher switching rate, because three seconds between operations is much too slow even for people, who have slow CPU's. A typical switch rate is a 100 times per second.

Again, the computer "seems" to be running four things at once. Now you and I know better; it's really switching 1-2-3-4-1-2-3-4 over and over. But it's fast enough that unless there are special conditions, you'll never know. Because people are so slow, slowing down a computer can often go unnoticed. Also, most of the time, computers are idle, waiting on people to do something, like type into a word processor, pull up records in a data base, move the mouse, or whatever. If there's nothing to do, which is often, the computer sits there twiddling its digits (a horrible pun, excuse me). If we take that idle time, and give it to another task, you'll never notice.

There's a slightly more friendly form of multitasking. In it, programs let the computer know when they can be "turned off" for a bit. In the ST, this typically happens while "waiting for an event," an event being a mouse click, keyboard button press, or whatever. When the system sees one of those, it swaps to the next partition. This is called "co-operative multitasking." Problem is, you have to have programs that were written with multitasking in mind, or you get

weird results; one program can take over the whole system by never giving the operating system a chance to swap them out. (This, in fact, is what happened in my multi-terminal communications package on the CDC in college).

Remember, though, the MMU is critical to all this. It's what allows programs to think they own all of memory and keeps programs from stepping on each other, by accident or whatever, and so on.

If you do multitasking without the hardware protection that an MMU gives you, you get "lots-crashes multitasking." This is yet another type, first mass marketed on the "Amiga." Users quickly learned which programs did not follow the rules because they would get the equivalent of an ST bomb: a "Guru Meditation" alert. (What? No, honest...I didn't work for Amiga back then. I didn't come up with that.) Only well-coded, "good" programs could multitask on the Amiga; "bad" programs, of which owners had to keep lists, killed the system.

Virtual Magic

Now, we can get really tricky. Let's assume your computer has four million real bytes of memory. Let's tell your program, when it asks, that the computer has 12 million bytes of memory, and write a special little program to help things along. (Out on disk, we have a 12 million byte file called "memory image".)

As long as your program stays within the four meg boundary, no problem. What happens when it goes to, let's say, "logical" (program) location seven million? Aha! The MMU sees it and invokes our program, and serious magic starts happening.

The MMU looks for a place in physical memory that hasn't been accessed for a while, say, physical location two million. This is called a "page," because usually we swap from 512 to 4,096 bytes at a time, for wizardly reasons too dull to dis-

cuss here. That page is saved onto disk, at location two million in that disk file. Then, "logical" location seven million is loaded from the disk "memory image" into "physical" location two million, that page we just swapped out (visualize this, please!), and the MMU is told that whenever anyone asks for "logical" location seven million, give them "physical" location two million instead.

The program then continues. Its access to "logical" location seven million worked, as far as it knows, because the MMU did its work behind the program's back. Thus, you now have 12 megabytes of memory for your programs.

Of course, if the program asks for "logical" location two million, that's reloaded off of disk into another "physical" address, the MMU table is updated, and off we go. Again, there is *no* relationship between logical and physical memory except for the MMU's table of who goes where.

Now, sure, going to disk is slow compared to going straight to memory. But most programs tend to not force many page-swaps to and from disk once they're rolling, and this works out pretty well. In fact, UNIX systems have been using it for twenty-some years, and "Virtual Memory," as this is called, was working way before UNIX was!

With a 68030 in your ST (as are available from several places, including me) or a TT, you, too, can get virtual memory running. It's already been done in specialized form; I saw it in Germany a few months ago, working with *Calamus*, in a Calamus-only version (not from ISD, by the way; by a hacker.)

But, if you want to pull this off and become a folk-hero in the TT community, just pick up an operating systems book with VM in it, and code the algorithms they give you. Motorola will even provide most of the guts of a VM system if you just ask.

Switching Magic

It gets even better. Let's assume you set up three memory partitions. In one, an ST program is running. In another, an IBM program is running, let's say, under pc-ditto (or a hardware emulator). In a third, Spectre is running a Mac program.

The MMU can just about instantly switch between them. Each one "thinks" it is running the whole machine. Each one "thinks" it owns memory. The reality is that with a switcher program, you can switch via one keypress from one partition to the next--instantly switching from ST to IBM to Mac to ST, about as fast as you can press the key. The MMU just swaps whichever partition into low memory, and the switcher program sets up all the hardware registers to where they should be, and handles things like mouse movements during the move ... it's not that hard. The program *Revolver* already does this now, but without MMU's help. Thus, programs mis-written can crash the system. Add the MMU, and it gets very solid. In fact, if done properly, you could crash a program in one partition, and the rest will keep running.

There really isn't a reason why we can't pull something really spectacular, and multi-task all three at once. Set up a timer to switch them on 1/60th second intervals, and then put all three screens, plus a fourth "status" screen, up on the ST monitor. You'd be able to see all four running at the same time on a Moniterm-like display; or, you could do an "extended screen" (where you push the mouse towards the edge of the screen, and the screen scrolls that way, showing you a bigger screen than the monitor can handle) for users on a small monitor.

Wild stuff, huh? That's what an MMU can give you.

Gadgets Magic

In the accelerator board we've been working on here, the MMU

has been getting a fun workout. For instance:

TOS itself, the ST operating system, is stored in two EPROMS. EPROMS are really pretty slow memory, and one access only gives you 16 bits, instead of 32 like the 68030 wants. So, let's copy the EPROMS into system memory, into fastRAM, and let the MMU worry about telling the system that what's in fastRAM should replace where the EPROMS used to be. It takes just 256K of fastRAM, which you have 8 megabytes of.

The operating system now runs in 32-bit (fast) burst-mode (very fast) memory. And all those slow things you hated about GEM speed up.

Or, let's just throw away the low 64K of ST memory, which is slowed down 50% by "video contention," and replace it with fastRAM. All of the operating system's variables, tables, and whatnots are located there. The operating system speeds up even more, because it doesn't have to wait to access a variable or table anymore; they come in 32-bits with no waits.

It might give you a grin to realize that the operating system is now in RAM, not unchangeable ROM. If you want, you can change *anything* you want in it by just patching it. Got any things you've always wanted to see in TOS? Want the desktop to look a little different (*evil chuckle*)? Hey, it's there, waiting for you to patch it. Instead of having to do dreadful kludges to intercept the XBIOS traps, for instance, you can patch right in and go. "The TOS you want is only a POKE away." Tired of the Malloc - un Malloc bug? It's there to fix.

Multiple Magic

Say you get playful, and set up two "logical" ST's inside system memory, with two different TOS images in RAM, two different screens, and so forth, and a timer to swap between them fast.

You could have that second ST you always wanted--say, for a per-

manent bulletin board installation--while keeping an ST you can use anytime handy. If one ST crashes, oh, well; the other one keeps running. (You know, you could also run things redundantly to help catch errors... Hmmmm.)

Or you could just as easily have two Mac's in there. Or PC's. Or, heck, even CP/M. (Come to think of it, I have a lot of CP/M stuff, and at 33 Mhz, the "emulator" is going to scream along.)

Want to Be a Magician?

If this sounds cool, and you find yourself drooling, all you need to do is get the Motorola 68030 manual (for its MMU specific stuff), and the 68851 PMMU manual, which tells you more than you want to know about life in the MMU lane. Better yet, there's folks at Motorola whose job it is to see

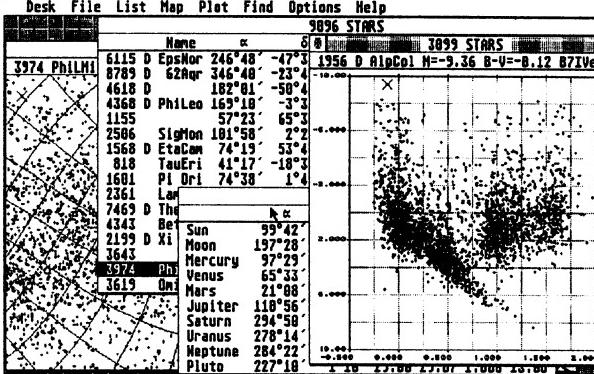
that manuals like this get into the hands of people interested in them. Call 'em and order them up. If all else fails, I'm sure Computer Literacy in San Jose (call 408-555-1212 for information on their phone #'s) has these books. Computer Literacy is programmer heaven. (I went crazy in there once and bought about 50 pounds of books, most of which are in my "instant use" book cabinet in the office.)

And y'know, if at WAACE or wherever, if just one person pulls me over to show me some real magic wreaked with an MMU, it'll all have been worth it.

Dave Swaps Out

Whoops, timer interrupt coming; I've got to swap to disk now. Time for other virtual writers in the magazine to have a turn. So, see you next timeslice around!

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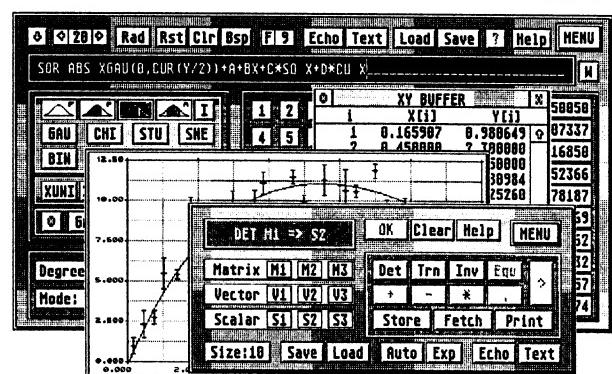


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How to improve a classic. From senior high to Fermilab, people are using it -- and coming back with new suggestions. And we listen. This new version adds statistical weights and errors, operations on data columns, random numbers, complex roots -- and more.



Both programs run on any ST or Mega, color or monochrome (Star Data requires 1 MByte). MoniTerm and TOS 1.6 OK. Prices include one update.

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June 1991

Current Notes

Page 33

Modem Madness

Confessions of a Dastardly Downloader

By Walter A. Cole

The Devils Toy

I sometimes think my modem is an instrument of the Devil! I am hooked on bulletin boards and I can't shake the urge to download every likely-looking file I find. I now have 40 disks full of arc'd files of utilities, applications, games, languages, operating systems and communications programs. God knows how many megabytes are encoded there! Let's see: 40 times roughly 720 k equals....

These have been unarc'd into 39 disks of utilities, accessories and applications, 10 disks of games (I've had to rein in my impulses on games because I'm so busy downloading and sorting, I don't have much time to play games), six disks of telecommunications stuff and 12 disks of language programs and related files. All of this is strictly PD and shareware. I also have piles of commercial programs, of course.

Smoking Your Print Head

Oh, how I love to print long .doc files! My poor Panasonic printer has gone through a veritable mountain of paper and worn out countless ribbons. I'm probably pressing the upper limit of the print head, which is good for millions of characters.

Midnight Madness

Because I'm a decent and considerate chap in most ways, this has lead me to work the BBSs in the middle of the night in order not to hog the precious telephone lines during busy periods. What a thrill to download a whopper like *Uniterm* or *Aladdin*!

Modem madness is not limited to downloading files--they have to be unarc'd, dumped on to the appropriate floppy and run through my favorite cataloger. Then, if the file looks promising, I have to print it out and then file the hard copy. This leads to a hacker's version of Parkinson's Law: if you have enough arced and unarc'd files to maintain, you can spend all your time doing just that and not have time to do anything else.

Working the BBSs is not limited to downloading files. No siree! Reading and leaving messages is just as addictive. Just about any subject under the sun is fair game (and some of it gets pretty gamey). When things have gotten dull, I've been known to feed in some irritating message, leading to a delightful spilling of spleen. A sly note left here or there can give rise to an avalanche of responses. How our users do rise to the challenge.

Users to the Rescue

But more than a place for spirited discussions, the BBSs are a place to get sound advice on all manner of problems concerning hardware or software. This is particularly true of the National Capital Atari Users' Group (NCAUG, Ottawa, Canada). One cannot but be impressed by the way users leap to the aid of someone in need of help. And the advice is almost always very sound.

We modem manipulators are a hardy and persistent lot, to be sure. Many's the time we are unable to connect to our favorite BBS--nothing but irritating "BUSY" or "NO CARRIER" messages on our scintillating screens. Then, we are often asked to reregister because the poor Sysop, the sucker who minds the BBS store, has inadvertently wiped out the user file. Or even more fun, the BBS owner decides to change the BBS software and we live through the agonies of the Sysops and their little helpers trying to get the bugs out. And, boy, do they have bugs!

Wiped Out

In the olden days--a couple or three years ago--it was not uncommon for the Sysop to wipe out all the files; not on purpose, you understand. I had the dubious honor, and obligation, of using my collection of arc'd files to help restore the file sections of more than one BBS to some semblance of its former glory. I still keep my clutch of arc-filled floppies in the vain hope that, once again, I may be called to render yeoman service.

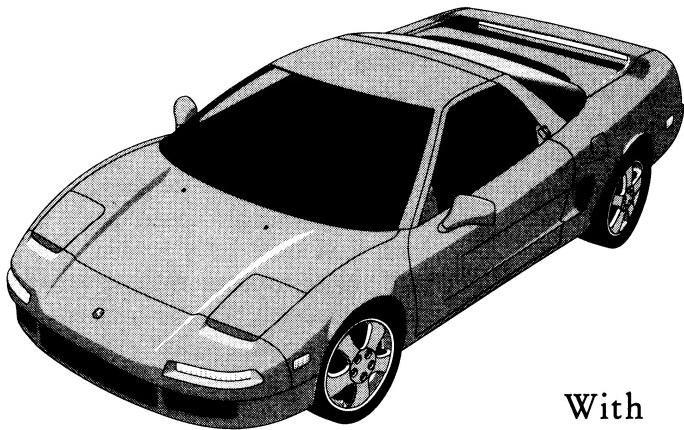
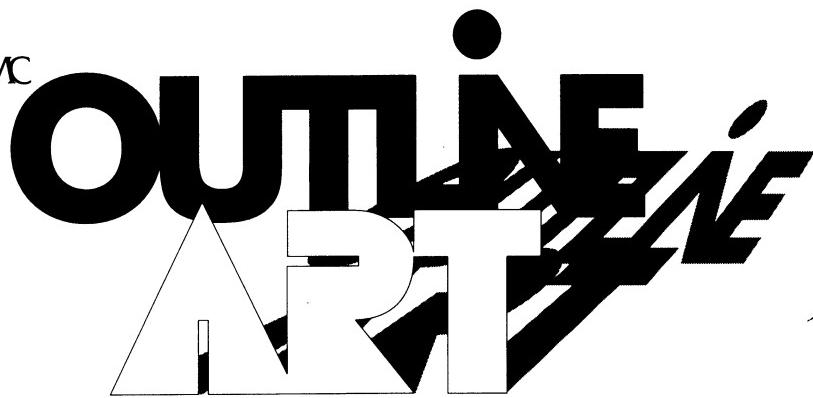
Well, what's to become of me and my mad passion? I guess I'll have to continue to feed my insatiable longing for new and different PD and shareware files. I might point out that my deep sense of obligation has cost me a pretty penny in money orders to shareware authors. Many of their offerings are excellent and worthy of our support.

Patron of Shareware Authors

So all you Compuserve, Genie and Delphi watchers ... keep watching and posting new stuff on our local BBSs. We desperate downloaders have to be fed regularly, or we may wilt and fade away to that big trashcan in the sky. Happy downloading, everyone!

(An earlier version of this article appeared previously in the final issue of the now defunct NCAUG's magazine, *Bytown Bytes*.)

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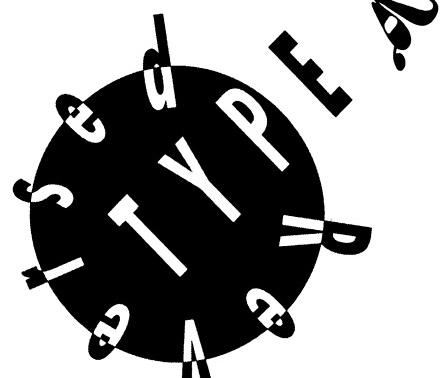
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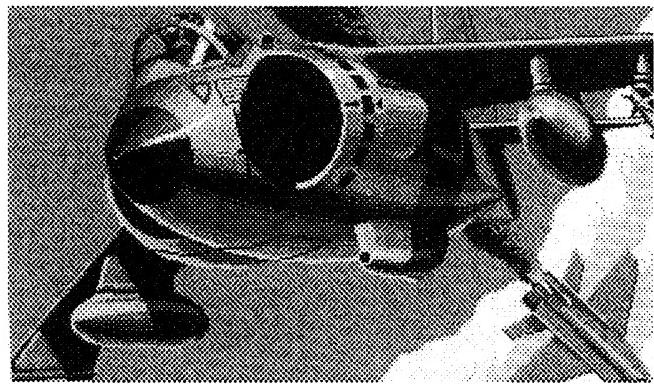
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PILOT

The Ins and Outs of Keyboard Flying

By Milton Laughland Jr.



Flight Sim Addiction

Seven years ago, at a visit with my brother-in-law at his office, he demonstrated the *Flight Simulator II (FSII)* on an IBM monochrome monitor. The *FSII* immediately infected me! Piloting a simulator was, wow! a dream come true. Unfortunately, I could find no affordable treatment for my sudden addiction; but the idea of owning my own computer simulator drove me crazy! Then a friend prescribed an affordable Atari 800XL which I bought. My initial therapy began with *FSII* and Microsoft's *F-15*. After hours of treatment, I was on my way to recovery. My mastery of flight and air combat increased by the day. My addiction was coming under control.

Then, a set back--the 16-bit *FSII*. Higher resolution, faster screen display, better graphics, and a Lear Jet! My deeply embedded addiction demanded a costly cure. I sold my 800XL and got a prescription for a 520 ST. Later, I increased the dosage to a 1040 ST.

You'd think by now I'd be cured. Unfortunately, time and computer technology refuse to stand still. Flight simulator realism gets better every year. For now, my 1040 ST keeps my addiction under control. Down the line, however, I'll be forced to upgrade to handle improved graphics, faster screen movements, and greater complex combat scenarios.

This leads me to my current addiction, Spectrum Holobyte's *Falcon*. Mike Heininger referred to me in his *Current Notes* article

"*Stalking the F-19 Stealth Fighter*" as the guy who keyboard flies the *Falcon*. At the Woodbridge Atari Users meetings, Mike observed my flight techniques against the computer and other users. He suggested that I share with you my *Falcon* experiences.

In developing these articles, I've decided to begin with basic flight techniques and then work into the complexity of air and ground combat. *Falcon* is not an eye-hand coordination game. As the pilot of a very complex simulator, you gather data from various sources, prioritize that information, formulate strategy, and finally make critical decisions in a matter of seconds. I fear that this complexity has discouraged many would-be pilots from really enjoying *Falcon*. My mission is to improve your abilities in piloting *Falcon*.

Assumptions

I assume you've read *Falcon's* instruction book. I don't intend to repeat the basics covered in their book. We'll fly at the rank of Major to provide enough difficulty to be challenging but forgiving enough to allow some winning. You'll learn very little at the First Lieutenant level, whereas the Colonel level should be left for only experienced pilots.

When I refer to numbers or symbols, I'm referring to those on the calculator keypad. All other numbers or symbols located above or below the lettered keys will be indicated with a "T" before the number or symbol.

The *Falcon* mission disks will be referred to as MD1 for the first *Falcon* disk (the enhanced version), MD2 for "Operation: Counter-strike," and MD3 for the third mission disk.

MD1 is the toughest. Turn hard and your air speed drops like lead. Roll over fully loaded, you'll stall. Nose-to-nose missile attacks rarely succeed. Wander over enemy territory, ground-to-air missiles attack like hornets.

MD3, on the other hand, provides the easiest combat with long-range radar guided missiles, onboard jamming, and more forgiving flight parameters.

MD2 strikes a friendly balance between the two. We'll begin training in MD1 but most of our training will be conducted in MD2.

Keyboard Flying

Most flight simulators favor the joystick or mouse for flight control. The *Falcon* does not. Flying the *Falcon* with the keyboard provides superior control over the joystick or mouse. The calculator keypad gives the right hand access to 16 keys with 21 functions in intuitive locations providing quick and easy access to essential flight controls, alternate views, and weapon system selections. Your left hand controls the trigger and auxiliary functions. Once accustomed to keyboard flying, you'll rarely need to take your eyes off the screen, especially during combat.

In contrast, the joystick requires one hand on the stick to control flight direction and the other

hand to fire the trigger and hold the joystick base. To change views, weapons, or other functions, you must release control of the plane.

The mouse uses one hand to control flight and the trigger while all other duties must be handled by the other hand. Both joystick and mouse control require frequent eye movement between screen and keyboard. Not a problem until you're dog fighting two vicious MIGs in close quarters.

Keyboard flying also requires less physical effort. Tap the "2" to raise the nose. Tap "4" to bank left. If you bank too hard, tap the "6" to compensate. The keyboard provides a more realistic and precise control of the Falcon while reducing hand fatigue. Try it, you'll like it!

Basic Training

1. We'll begin in MD1 Milk Run at the rank of Major. Load only air-to-air missiles so you have some weight but not too much to cause stalling while rolling over. Don't load the auxiliary fuel tank. Using the auxiliary fuel tank will be discussed at a later date.

2. Once in the cockpit, pull down the menu for "Options" and click on "All Sound." Though the *Falcon* book recommends keeping the engine sound off, the sudden loss of engine noise will alert you of a stall or serious missile hit before Ms. *Falcon* alerts you with her digitized "warning."

3. Press the "W" key to disengage your wheel brakes before starting your engine. If you hit the afterburners first, you'll give your *Falcon* a hernia, resulting in a mission abort (ESC/Abort Mission.)

4. Press the "Z" key to release the automatic leveler which corrects for minor banking. I have found this option of little value except when attacking ground targets. This option tends to make a pilot over compensate when turning or banking.

5. Start your engine.

6. Activate full afterburners ("/" & "T"). Don't worry about fuel because you'll either finish your mission or be dead before you use up all your fuel. When you reach 150 knots, raise your nose ("2") slightly. After leaving the ground, raise the landing gear ("G"). Turn off your afterburners when you reach 300 knots (/). Rate of climb should be around 10 \ddot{a} .

7. Once airborne, climb to about 10,000 ft. Practice rolling over by holding down the "4" or "6" key. Note that the *Falcon* rolls like a real fighter and that after a full roll, the nose is pointing downward. When rolling, pull your nose up first (tap "2" once) and then roll. When you complete your roll, the nose should be close to level flight. When making manuevers, view your *Falcon* from your spotter plane ("T9" and "T2") to provide a conceptual view of the *Falcon's* flight characteristics.

To improve your flying skills, pretend you're a pilot at the All Services Air Show at Andrews Air Force Base, Maryland. Just south of your airfield is Woodbridge, VA and to the east is Crystal City with its tall commercial buildings (map makers are going to be upset at this rearrangement.) At your leisure, begin making dives from between 10,000 and 20,000 ft. and low-level approaches of 1,000 to 2,000 ft. at either the tall buildings of Crystal City or the small buildings of Dale City. Don't worry about firing weapons. If you don't learn to control the *Falcon*, weapons will be useless. The altitudes are directly related to combat training you'll receive in later lessons. During your dives, practice holding your center head-up display mark on a building. Learn when to pull up at the last possible moment. Practice makes perfect. Practice, practice and more practice.

8. Whenever you're in trouble as to the direction of your *Falcon*, such as nose diving or upside down (as in "Where Am I?"), hit the "*" key.

It will level and center your flight direction. You know you're an experienced *Falcon* pilot when you no longer use this key.

9. If you lose sight of your MIG, hold down the "A" key to turn flight control over to the on-board computer. The computer will bring you to a position behind the enemy. Once you have the MIG in sight, release the "A" key and take control. The computer is not as good as a live pilot and you'll never gain flight experience letting the computer do the work. You can automatically follow the MIG visually by pressing the "D" key. However, it usually results in total disorientation.

10. You don't have to land the *Falcon* to successfully end your mission. Just press "ESC" and click on "End of Mission." This allows you to continue your next mission while avoiding the dread of landing. *Falcon's* landing requirements are very unforgiving. No matter what flight simulator you have, if you always crash, you'll give up flying (especially in real life!) I can land at the Major level but it adds nothing to the excitement of *Falcon*.

11. Suddenly, you're hit by a missile or gun fire. Ms. *Falcon's* voice shouts "warning" and your entire right panel glows bright red. You have two choices. Press "ESC" and click on "End of Mission" (avoids death or capture while allowing you to continue to the next mission); or press "CTRL/E" and bail out. Be sure your plane is level and that you have some altitude when bailing out. If you're high over enemy territory, avoid being captured by trying to glide back to friendly territory before pulling the ejection seat lever.

Next month, we'll get into air-to-air cannon and missile combat techniques to improve your prowess against the MIGS in MD1. Also, I'll provide some hot tips on spotting MIGS before your radar picks them up.

Captive

Forty Years of Sci-Fi Role Playing

Review by Alfred C. Giovetti

Have you ever dreamed of being trapped in a computer role playing game and unable to get out. Perhaps *Captive* is the game that you had in mind. *Captive* has 65,536 levels for the adventure gamer to complete before the game is finished. At this rate, you can plan to be this game's captive for quite a long time. Software Toolworks estimates a playing time of 40 years which is somewhat longer than the average playing time of 40 hours for adventure games of this type.

Captive is not just another *Dungeon Master* clone. This heads-up real-time role playing game is set in space with a futuristic feel, but none of the documentation gives us a date when the action occurs. There is magic in this game, a magic that makes great games, the magic that makes best selling games. Anthony Crowther and RATT have outdone themselves in producing a technically excellent game that is fun to play and complex and involved enough to keep the most ambitious game player busy for years and years.

The Plot

You are convicted of a murder you did not commit by an overburdened and oversensitive judiciary and sentenced to 400 years of cryogenic sleep. You wake up 250 years into your sentence, and find a battle raging outside of your prison cell. You awoke because the battle has managed to damage the computer that controls the cryogen stasis field. You still live because the life support computer remains undamaged. You realize that it is only a matter of time before the life support fails. You must escape from your cell.

You find a model ABCC 500XL/GT briefcase computer stored in a corner of your cell. Your plan of escape is simple: you will use this computer to communicate with someone on the outside who will help you escape. The computer has no instructions. Eventually you are able to run the computer and locate a team of four droids who will answer your computerized commands. Perhaps if you fly the 'Swan' mothership and droids to the green dot flashing in the center of the computer holochart, you may be able to rescue yourself.

Robot Development

Similar to *Dungeon Master*, *Captive* is a role-playing game with its roots in character development. The four robots have individual values for the attributes and skills of experience, dexterity, vitality, wisdom, health, robotics, brawling, swords and handguns. The scores for these attributes and skills increase as you explore the maze, kill your opponents, and find treasures of gold and equipment.

Damage in combat to the *Captive* robots is in the form of damaged circuits and components instead of cuts and bruises. Body parts are interchangeable and are damaged individually in combat. Each body part can be repaired, replaced, exchanged and upgraded at the appropriate Tesco's hypermarket.

The Interface

Captive is controlled by simultaneously active keyboard hot keys and mouse interface. The mouse is essential to the game and controls most functions. Like *Dungeon Master*, the numeric keypad can be used to control the movement



through the mazes, while the right hand is left free to control various other functions from the heads-up display and the icon matrix.

The right hand portion of the screen has a 5x5 icon matrix composed of the four compass directions, turn right, turn left, up and down, the eight hands of the four characters, the power and damage level bars, disk drive access, character attributes, sleep and pause or hold button. Experimentation in the effects of these icons is necessary to effectively use the interface, since instructions do not come with the game.

Along the top of the screen are five screen icons that become active when devices are purchased and plugged into the brain sockets of the four droids. Accessories like filters, optics to modify visual circuits and display, radar, auto mappers (optic #3) and motion detectors can be purchased at the markets.

Combat

Captive combat is accomplished by multiple right mouse button clicks on the two front robot hand icons. As you progress in the game you will acquire hand weapons, edged weapons and handguns to further improve your fighting skills. You must be level 9 in brawling before you can train in swords, and you must be level 9 in swords before you can train in handguns.

You can use doors and ladders to kill and maim your *Captive* opponents. Lure the monsters into the doorway or under the ladder and close the door or jump down on top of the monsters to bash them into the next galaxy. The battle will yield treasure of cash, weapons,

cameras, ammunition, optics, dynamite, microchips or spare parts. Cabinets on the wall hold more treasure and hidden switches. The electrical wall sockets can be used to recharge your chest batteries and to provide a powerful beam weapon. Click on the wall socket and click on your chest to recharge with the electrified hand. Use the beam weapon by pointing and clicking with the electrified hand. Be careful not to touch items with your charged mouse hand, or they will disintegrate.

Getting Started

Captive is very difficult to get started. When the game begins you have control over the droids, a space ship (named the Swan) and a lander drifting in the middle of space. The up and down ladders from the icon matrix control the relative size of the planets in the 8x8 galactic matrix. First you need to put the droids' chips in their sockets in the upper right hand corner of the paper doll display. You will need to give each droid a name to make it operational.

Point to the blinking green dot and click on it with the right mouse button. Zoom the planet to the highest magnification using the down ladder icon until you can see a small diamond shape on the surface of the planet. Now click the mouse crosshairs on the diamond shape on the surface of the planet. Click on the orbit icon from the icon matrix. When the message "you are in orbit" is displayed, click on the lander icon to land on the safe diamond-shaped land mass.

On the planet surface, walk toward the large green and yellow door with four blue buttons. Pick up the message icon from the ground to the right of the door and follow the instructions for opening the door. Enter the complex, pick up the dynamite and the next message icon. You will not be allowed to leave until you blow up the generators. Push the wall in the rear of

the vault with the ball shaped wheels along the bottom to reveal the rest of the maze by clicking the right mouse icon on the "walk forward" icon in the icon matrix.

You are now in your first *Captive* maze. Fight all the monsters you find. Take their gold and put it in the hand of one of the robots in the back row. Put the stronger robots in the front for fighting. If you go straight you'll run into a market with #3 optics. Buy one. Install the optics on any robot's brain. Use the smooth shaped robots with the better optics as the leader and the display will be clearer. The #3 optic is a mapper that permits automapping of your surroundings.

The small man wearing a laboratory coat in a small room with a computer has a clipboard treasure. Use the access code from the clipboard to get the probe out of the computer. Place the dynamite in the top circle of one of the generators (The large pulsing triangular shaped colorful devices with the round circles on top and the electricity sparking around them.). As soon as you place the dynamite in one of the generators, run for the exit by the most direct route and click the right mouse button on the door from which you came in. Use the combination on the blue buttons to open the door. Return to the lander and blast off. Once in the Swan mother ship, pick up the probe and place it in the center of the galactic display (holomap) and the probe will fly to the planet which is your next objective.

Graphics and Sound

The graphics are colorful, well-drawn 16-bit graphics of walls, devices, monsters and characters. At least 32 colors can be seen in the enhanced mode of the 1040 STE. As in *Dungeon Master*, items fly through the air and monsters are animated for full effect.

A musical score and digitized sound effects provide very realistic background and atmosphere for the game were programmed by Super

CC on the Sound Tracker. Monsters grunt when they are hit, swords clang and characters scream when they run into walls. STE computers will provide surround stereo sound when hooked up to your stereo or played through the stereo speakers or headphones.

Drawbacks

The screen for displaying the automapping function is too small to be useful. Maps found throughout the game give a better view of the floors being mapped, but you still need a lot of graph paper. There is no autocombat. Inventory is limited by the number of available slots per character so that a total of 24 items can be carried including gold stores. The multitude of items and their uses can be very obscure and impossible to figure out without help. The vast size of the game is discouraging. Who wants to spend 20 years playing a game?

Advantages

Intelligent object management allows you to return to pick up dropped items within the maze. There are ten save games which should be more than enough. Once you get the hang of the game, you can avoid the pointless dying sequences. The game is highly addictive and enjoyable. Due to the large size and the varied challenges, *Captive* keeps your interest after many hours of game play.

Conclusions

Buy this one, give *Captive* a chance to grow on you and you may become the *Captive*. The game is good and has all the magic of a really great game. A quality product in graphics, sound, design and game play. *Captive* is an exceptional feat of programming.

Captive, \$49.95, Mindscape International and Software Toolworks, 60 Leveroni Court, Novato, California 94949, (415)883-3000.

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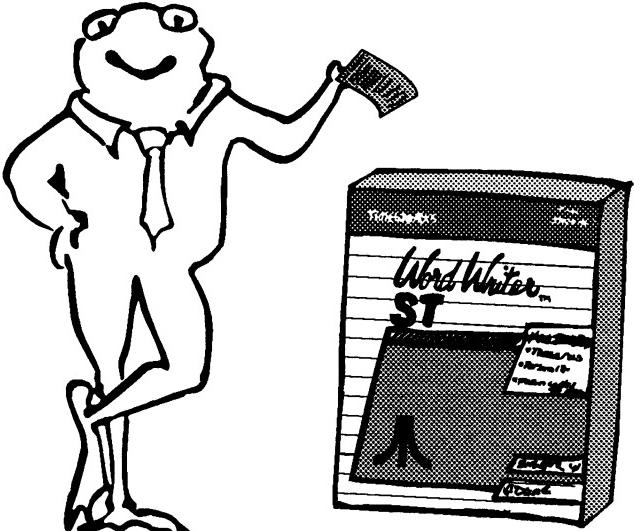
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Always the ladies' man, Toad has become an even bigger hit with the greenbabes around town with his heretofore untapped poetic skill. He's got Word Writer ST - a simple but powerful word processing program. It's inexpensive, which we all know is a plus when you've got to have cash to spend on the women. His latest work, "Your Egg Mass Is a Shiny Beacon," has worked wonders on his latest catch. So it's no coincidence that Toad is smiling this month; it's because Toad chose **Word Writer**, and that has made all the difference. Only \$49!



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In April, we sent out sixteen thousand postcards. The response was terrific! If you want to be on the list to receive our next catalog (which will include eight bits, STs, TTs, and more) please be sure to call us! If you got a postcard, you'll probably get a catalog - but if the code on your card ends with a number less than 8806, you may not! Be sure to call to be certain!

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ST TOOLBOX



by J. Andrzej Wrotniak

Sometimes I feel ridiculous realizing I can remember the days when a four-function pocket calculator could set you back for as much as \$500. Seems like just yesterday...

Walk into a department store. You will find a shelf with a dozen or more different calculator models, ranging from \$5 to \$100 or more, and a decent "scientific" calculator with all the basic math functions (like cosine, logarithm etc.) can be bought for a mere \$15.

When was the last time you did a long division by hand? Are you sure you still know how to do it? And what about logarithm tables? Well, you just keep a calculator handy on your desk--just reach out and punch the numbers.

If you use a computer with the desktop metaphor (and of course you do, otherwise you would not be reading this magazine), the chances are you have at least one calculator program, possibly as a desktop ac-

cessory. Once you call it from the Desk menu, it pops up on the screen, buttons and all, looking very much like the real thing.

Well, it looks like people love writing calculator programs. Sometimes I suspect that everybody capable of writing one has already done it. Whenever a new calculator accessory shows up, I am almost certain someone has just reached the critical level of programming skills.

Here comes a valid question: do we really need calculator programs? If you can buy a decent multi-function calculator for \$15, you can just keep it at your computer desk--and you do not need to use a desktop accessory slot (as a matter of fact, you do not need to boot your computer at all).

Personally, I am not sure whether the calculator metaphor (with just a single number being displayed) is the most convenient one to use. The original calculator

user interface was limited by the keyboard and display capabilities, and emulating these limitations on a computer screen (capable of much more) is not the most ambitious solution (with possible familiarity being the sole argument in its favor). For example, if you make an error half-way through a sequence of operations, the obvious (and safest) thing to do is to re-enter everything from scratch, and if you suspect an error in one of the previous entries, there is no way to check it.

On the other hand, desktop calculator accessories are nice things to play with, they never get lost under piles of papers; it is also quite difficult to step on them (or to spill coffee, beer or worse). Most important, some of them may also have unique features, difficult to find in "regular" (i.e. hardware) calculators. Last but not least, many of the calculator accessories are freeware, so why not have a look? The only problem is choosing the one that best fits your needs.

During a recent cleanup of my archives, I discovered quite a few desktop calculators. All of them are free (some are shareware, so sending a contribution to the author may be a good idea), and most should be available in the Current Notes library.

The Simplest of the Bunch

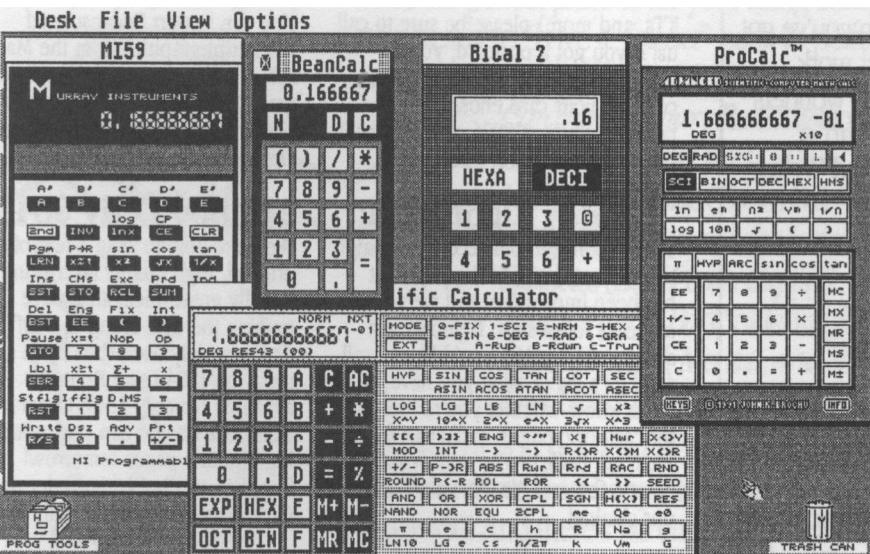
The desktop calculators available for free range from very simple to quite sophisticated.

The cute *BeanCalc*, for example, does just the basic four operations. The arithmetic error handling is nonexistent (just a zero will be usually displayed), but this can be forgiven in so simple a pro-

Desktop Calculators

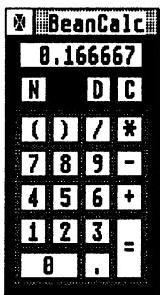
The Good, the Bad, and the Ugly

...and Country Music in West Virginia



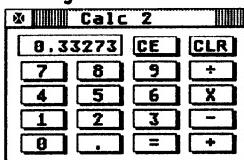
The moment of truth: get them on screen, move around, check the window redraw algorithms. All calculators mentioned in this article (with one exception) do the windows right. Not bad.

BeanCalc: cute and very simple (not to say primitive), but comes with the program code in C—an invitation to play and learn.



gram. On the other hand (courtesy of the author, whose name I do not know), it comes with the source code in C. If you program in this language, then you may find the original *BeanCalc* a good base for experiments and improvements.

Another very basic offer is *Calc2* (again, author unknown), whose main advantage seems to be small size (less than 13k). If you need just the four basic operations



Calc2: just the basics, but works just fine.

and six digits of accuracy, you may find it useful. Otherwise--not much to write about.

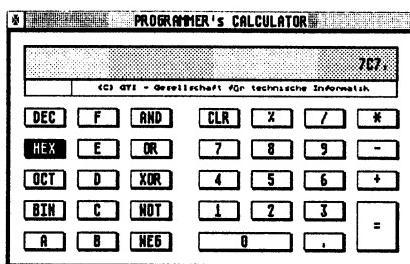
BiCalc2 is almost as simple, but it also has a hexadecimal mode. It is, however, still too plain to be considered useful. Its display accuracy is limited to just two digits after the decimal point (truncated, not rounded, which makes things even worse.) It also has some windowing bugs, e.g. not redrawing itself prop-



BiCalc2: converts numbers to hex, but suffers from bugs. Let it go.

erly after receiving an update request. Worst of all, its handling of large numbers (either integer or real) is quite erratic. Forget it.

Finally, the *Programmer's Calculator* (from GTI in Germany) offers the basic four operations plus the essential integer functions (like AND, OR, XOR and NOT) in deci-

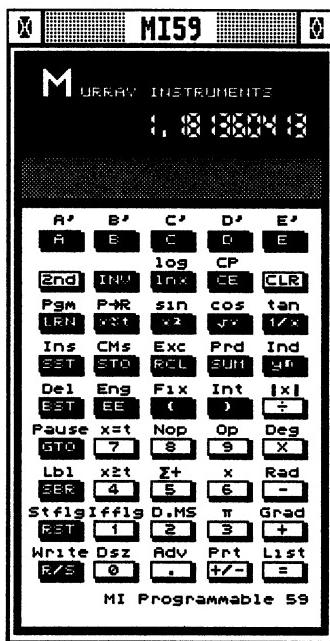


Programmer's Calculator from Germany, plain but works OK, although bitwise operations may be too limited for some

mal, hexadecimal, octal and binary modes. These functions are, however, implemented on a rudimentary level--too simple to be useful in real-life programming applications, where one would need some degree of control over the word length (byte, word, long) and the leading bit (signed or not). If you need a handy hex/octal/binary calculator, read on, you will find one.

MIS9--An Old Classic

TI59 from Texas Instruments was one of the most successful advanced programmable calculators of all time. Its programmability blurred the line between calculators and computers, and you could do quite a lot with it.



MIS9: a faithful clone of the Texas Instruments' workhorse. Unfortunately, even those who are willing to live with the cryptic key sequences, may be disappointed by bugs and crashes.

MIS9, written by Murray Levine, (the version I have is 1.0 from 1988, and I am not aware of any updates) is an ambitious (and almost successful) attempt to recreate the old faithful *TI59* on the screen of your Atari ST.

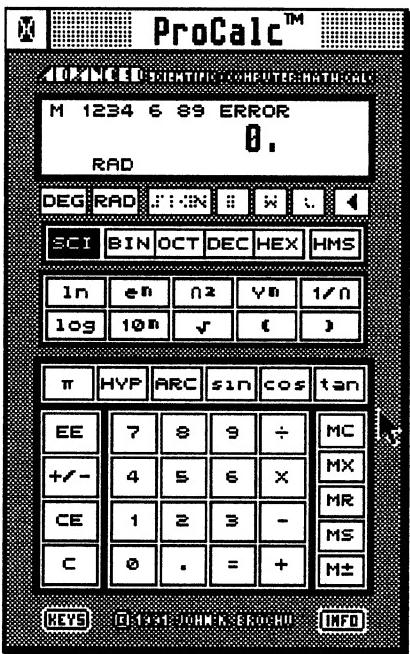
This, unfortunately, includes all the *TI59*'s limitations and the need to memorize lots of detail (for example, to load a program saved to disk, press the [Inv], [2nd] and [R/S] keys, what could be more simple?). That is why I have to consider the *MIS9* an attempt to show that yes, a *TI59* can be emulated on a computer screen, thank you. Those of us who have used the *TI59* a lot (and still remember how it works) may like its on-screen version, but the others will not want to bother. Do I really need the *TI*-style programmability? A five-line BASIC program is easier to enter, execute and modify than the corresponding sequence of 40 or so *TI59* steps (displayed, when you edit it, as series or key row/column combinations).

In other words, *MIS9* is, indeed, an exercise in ST/GEM programming, an effort made--at least as I see it--in not the most useful direction. The program is competently written, can be run both as a desktop accessory and an application (monochrome only), but its usefulness as a desktop calculator is quite limited. Times have changed since *TI59*.

The situation is additionally complicated by bugs in the MI's numeric operations. For example, trigonometric functions for arguments below one degree return zero, and some operations (like exponent or a sine of a large number) just crash the program with the longest row of bombs I have ever seen. Even if you are an old-time TI aficionado, *MIS9* may disappoint you.

ProCalc--the Reviewer's Choice

ProCalc (CN library #559) is the newest addition in my collection, a 1991 shareware from John

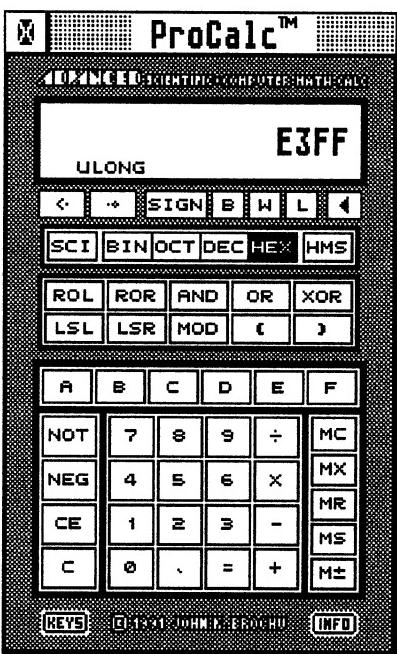


ProCalc: well-designed, well-implemented, well-behaved. The author of *Pic-Switch* makes a comeback just to show us that some things can be done right. This picture shows the "scientific" keyboard.

K. Brochu (his *PicSwitch* was one of the most popular and useful programs on the ST). The only real criticism I can offer here is the calculator metaphor (with the single numerical display)--but this is a matter of taste and a conscious design choice (not implementation flaw).

ProCalc can be used either as a desktop accessory or (by renaming the file to .PRG) as a stand-alone application, and it runs in high or medium resolution. It can be used as a "regular" calculator with floating-point numbers and an extensive set of math functions (exponent, logarithm, trigonometric, hyperbolic) or as a "programmer's calculator," performing the conversions and basic operations on integers expressed in decimal, hex, octal or binary formats.

The last aspect is why I am switching to *ProCalc* when I need to play with bits in various number representations. The program gives you full control of the word length (8, 16 or 32 bits) and the meaning of the leading bit (sign or digit). Proper truncations are performed

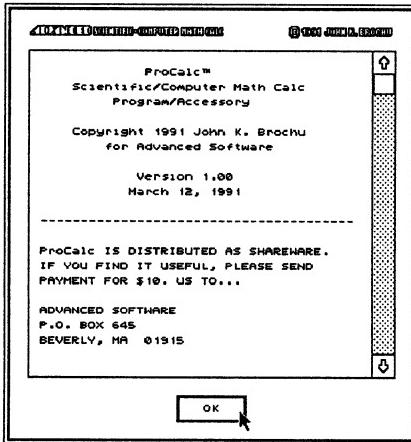


Clicking a proper button from the top row brings *ProCalc* into the "programming" mode. You may not be able to find this feature in a drugstore calculator.

automatically and the operator list is quite complete (including, for example, rotation in both directions).

As an extra, Mr. Brochu added the time calculation mode, where you can add values in minutes and seconds--this comes in handy sometimes!

Button descriptions change depending on the current mode (scientific or integer), and you can also display the keyboard equivalents of the screen buttons, which makes gradual switching to the keyboard



ProCalc also has a nice on-line help, though you may find the tiny font not very readable.

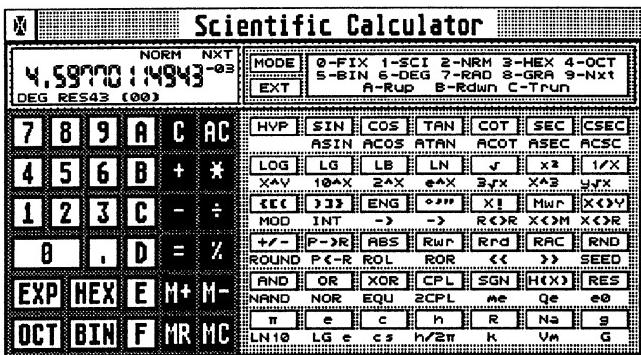
much easier. The program has 11 memories and most of the operations are quite intuitive. Well, there is even a brief (but fully adequate) on-line help in its own scrolling window! The help is not available when the accessory is activated from memory-greedy programs (heap allocation fails), but this is a minor complaint. (On the other hand, I believe this can be easily fixed, as the missing memory amount seems to be small and could be allocated upon bootup in the future versions.)

ProCalc is thoughtfully designed, cleanly implemented, has the right look and feel, and works (at least as far as I was able to check) as documented. Looks like Mr. Brochu got tired watching the efforts of other calculator programmers and decided to show them how things should be done. Well, looks like he scored another ten again!

Other High-End, No-Cost Offerings

The *Taschenrechner* (a.k.a. *Scientific Calculator*) by M.Weller from Germany is even a more ambitious effort than *ProCalc*. It will be up to you, the user, however, to judge how successful this effort was. On one hand, *Taschenrechner* has a somewhat wider function set, including base 2 log and antilog, pseudorandom generator and some physical constants (bit operations on hex, octal and binary numbers are also included). On the other, I find *ProCalc* more logically designed and easier to use.

I was unable to find any English documentation for the *Taschenrechner*, but with some patience you should be able to figure out how most of its features work (a hint: functions described below buttons are activated by clicking on [EXT] first, and mode switching is done by clicking on [MODE] and a digit). Because my preference for *ProCalc* may be a matter of taste, you risk nothing getting a copy of the German program and trying it



out. I wouldn't be surprised if you like it.

Another high-end offer is the *TN P-Calc*, also known as *Take Note Calculator 1.2* (CN Library #555) from Take Note Software in San Francisco (publishers of *Take Note*, "an ear/sight training program for musicians.") The choice of functions in *TN P-Calc* is quite similar to that of *ProCalc*, with one visible extension: a window with a tape-like history of past operations (with a possibility of a printer echo).

In spite of this extra feature I find that, again, *ProCalc* is a significantly more useful tool. First, it has a more logical button layout and better ergonomics (this, I admit, may be a subjective impression). Second, the functions built into *ProCalc* are more thoughtfully designed: for example, the necessity to switch from the scientific to bit operation mode allows the avoidance of some confusing displays (like showing the binary representation of the integer part of the square root you have just computed). Third, *TN P-Calc* has some painful omissions, like the absence of the angular degree mode (going through the [RAD] button every time you want to compute a trig function or through [DEG] every time you perform the inverse operation can become quite irritating after a while).

Last but not least, the programmers of *TN P-Calc* did not show enough imagination in predicting possible results of erroneous arithmetic operations. In the first five minutes of using the program I

was able to crash it twice (I have to admit, reluctantly, my skills in this area): first computing a tangent of an odd multiple of half pi, and then computing an exponent of too large a number. This can be pretty costly if you are in your word processor, a couple of hours from the last save operation! All personal preferences aside, this was enough to lose confidence in the program.

The Bottom Line

Frankly speaking, I was sadly surprised by how many of the programs compared here I was able to crash (or cause other, less critical, misbehaviors) within just the first five minutes of use. Freeware or not, one would expect a better performance.

The programs listed can be divided into two groups. The simplest ones are quite limited and do not offer anything beyond the capabilities of credit-card sized hardware calculators you can buy for \$5 or less (I got one as a freebie with a carton of cigarettes, really!). Tape one to the top of your keyboard

and you do not need to waste an accessory slot.

The more advanced calculator accessories may offer some features not easily found in "real" calculators. Unfortunately, out of the four I tried, two (*MIS9* and *TN P-Calc*) suffer from implementation bugs. From the remaining two, the German *Taschenrechner* may have a somewhat wider set of functions, but our ol' American *ProCalc* (Geez! I just wrote "our," looks like I'm about to grow roots in this strange and wonderful country!) seems to be more user-friendly and better designed. Just in case, check both.

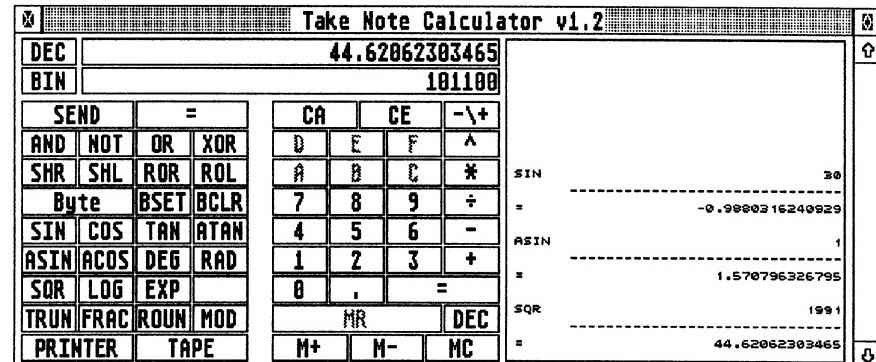
Programs I am not Writing About

When I presented our Publisher with the outline of this article, Joe asked: "Why aren't you mentioning your *El-Cal* and its simplified versions?"

Well, I said, first of all, I would feel quite uneasy comparing my own programs with others. It is difficult to stay objective, even if you try.

Second, we are talking about free (at most, shareware) programs here, and *El-Cal* is a commercial program: some of the people who use it, really bought it, and one day the dealer from California who wrote us a bad check may even think it over and send us a good one.

Third, all the calculators I am comparing are desktop accessories (although some also can be run



The *Take Note Calculator* has many functions and a tape display, but suffers from some design flaws. It is also quite easy to crash—a major disadvantage in a desktop accessory.

from the desktop). *El_Cal* is a huge, stand-alone program and does not fit in this category.

And fourth, these programs are designed to do different tasks than *El_Cal*. They are supposed to be calculators, and that's what they are, some good and some bad, but calculators, no more and no less. *El_Cal* is intended to do lots of other stuff, and whoever wants to know what it does, may find it out from the ads we buy from *Current Notes*.

"Okay," said Joe, "but you may still want to explain that to our readers since they will wonder why your programs were not included." "Okay," I said, "will do, but I hope I will not be accused of free advertising." "Don't worry," said Joe.

Tired at the Keyboard? See West Virginia!

As you may remember, I always wanted to be a food and entertainment critic: this is just my kind of job. No luck, nobody wanted me

as a food reviewer, and that's how I ended up writing about computers. Having a column in *Current Notes*, I enjoy, however, the privilege of being able to depart sometimes from computer matters and write on other subjects.

This time it will be a plug for the beautiful West Virginia, just three hours of driving from Washington, DC (remember, if you drive through Virginia, the police there have funny ideas about your rights to receive radio broadcasts of your choice, and may not like your radar detector!).

I have done my share of hiking. The Carpathians, Caucasus, Tien Shan, the Rockies. The top of Mt.Fuji. But West Virginia is special. Wonderful winding roads, lots of camping space, small forgotten towns, simple, outgoing and friendly people. If you do not hike, just drive around--or take the Cass Scenic Railway.

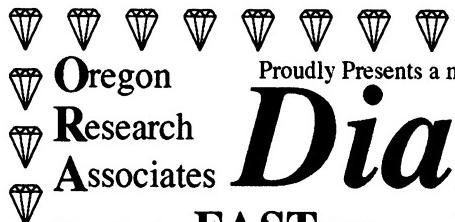
My warmest recommendations go to two places. The first one is

the Highlander restaurant at the 19th century Hermitage Motor Inn in Petersburg (at the only traffic light in town, down Rte. 220). They are the best restaurant in the radius of 40 miles not just by the virtue of being the only one. Above all, be sure to try the buckwheat pancakes for breakfast!

The second place is the Country Store Opry at Pansy (six miles more to the South), where at 7:30 on Saturdays, for \$1.50 (this is NOT a typo!) you can treat yourself to three hours of simple and true country music played by local musicians for the local public. After ten minutes you will recognize you are participating in something very unique and real. Remember I've sent you there.

Programming As a State of Mind

No, I haven't given up. The next installment of the programming cycle will appear next month. I just decided to have a small break (or to give you one).



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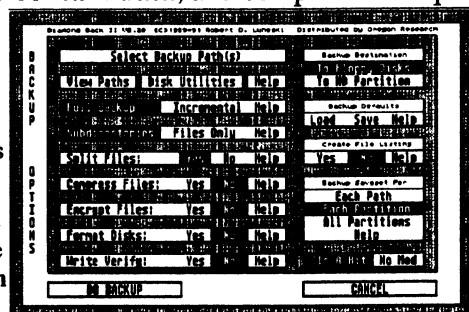
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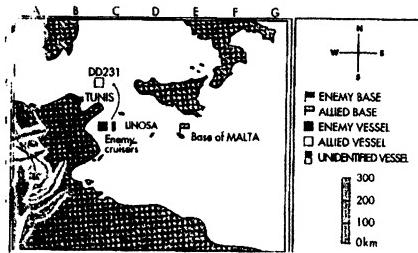
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Advanced Destroyer Simulator

When Tanks Go to Sea

by Mike Heininger (c) 1991



Sherman M4's Nautical Twin

Fans of Loricel's World War II tank simulation, *Sherman M4*, will be happy to learn its nautical twin, *Advanced Destroyer Simulator*, is now on the WW II high seas tweaking Nazis and Fascists from Norway to the Mediterranean.

With zero advance heraldry, one lonesome copy of *ADS* suddenly appeared on L&Y's games wall in April. At first glance, the dark, sinister package looked like it said AIDS. At second glance--the packaging is still mysterious--*ADS* is by Futura, (c) 1990, with Groupe Loricel, in very small type, on the back cover. And that is all you are going to find out about the company in this game--no authors, no address, no telephone number.

Reminds you of another parlor game with that famous line: "Go fish!" Too bad if you have a problem with the copy-protected disk. Too bad if you have a technical question. Sure, you can always go back and hassle the dealer, but it would be much better if you could reach the company.

Excellent Game

Fortunately, the game is much better than it first looks. In fact, *ADS* is a masterpiece of how to make a fun game. Instead of getting bogged down with tons of details and instructions, *ADS* has a compact 48-page manual that is mostly a summary of 18 scenarios.

In your 35-knot, 3200-ton, 1939-model British destroyer of the category HMS Onslaught, type DD231, you face mostly German cruisers and destroyers plus a few Stukas and submarines as you try to protect Allied shipping and reduce Axis tonnage.

You have two forward turrets, each with two 120mm guns (4.7-inch) plus another twin-gun turret at the stern. On each side are mounted two torpedo launchers, each with four torpedoes. The gun turrets rotate 270 degrees, the torpedo launchers 90 degrees.

There are no depth charges. After tracking a sub on sonar, you wait till it surfaces to blast it with shells or torpedoes. The rare Stuka attacks are fended off by keen maneuvering and elevated guns--yes, the 4.7 main destroyer armament really served a dual purpose.

Classic Surface Ship Engagements

All this leads to classic surface ship engagements of each opponent trying to bring maximum firepower through broadsides--guns and torpedoes. Naturally, torpedoes are far more lethal than the rather small guns. One or two well-placed torpedoes equal 10 to 20 shell hits. Even pouncing on helpless tankers and freighters can be an all-day affair unless torpedoes are used.

Handling the destroyer could not be more pleasant. Here's a typical scenario. After getting a mission briefing complete with map, your ship starts from harbor. Press the [\uparrow] key to half speed until entering the open sea when you press the [\uparrow] key again for full speed. Watch that depth gauge! It is possible to run aground when you least expect it, thus ignominiously ending the mission.

Pressing [F6] for map, and [F7] to zoom in, plot your heading to intercept the enemy. When you reach open sea, press [F8] to speed up progress. The program automatically returns to normal speed when a ship or coast is near.

Press [F1] to return to your wide angle view from the bridge. Glance at the radar on your left to check for ship blips. Press [F2] for your binocular view (twice the power). Press the numerical keypad [4] to swing left, [6] to swing right; these same controls later will help aim your turrets and torpedo launchers.

Cunning Gun Sighting

Now the cunning part. Press [F3] to see your gun turret 1. Press the numerical pad [8] to raise the gun for maximum elevation. This will save time when you first close with the enemy. Press [2] to do the same with your second gun turret in front. Press [3] to repeat for your third gun turret on the stern.

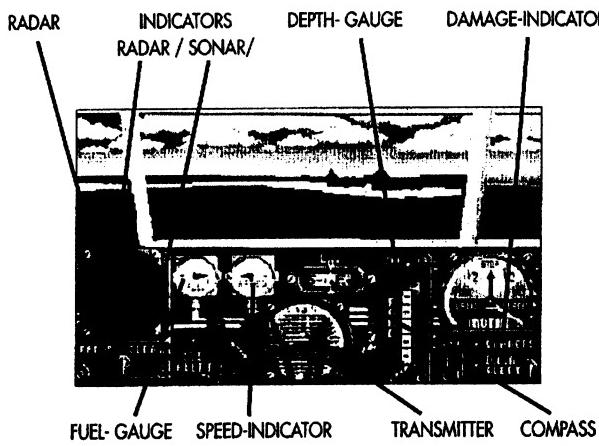
Press [F4] to see the view from your port (left) torpedo launcher. Press [2] to switch to the starboard (right) torpedo view. Notice how the gun and torpedo views give you 360-degree coverage of your ship. Get in the habit of doing much of even your routine surveillance through your gun and torpedo sights.

Surveillance via weapons may not be tactful in peacetime, but in wartime, hey--every second counts! Just don't get excited and press the spacebar to fire until you confirm that it is an enemy in your sights.

18 Missions

Advanced Destroyer Simulator offers five specific missions and one general search and destroy mission in each of three key WW II naval theaters: the Mediterranean Sea, English Channel, and North Sea.

In the North Sea, emphasis is on coastal intrigue in the extremely



challenging narrow waters of the Norwegian fjords. For example, better have your Pampers on when you sight a German cruiser blocking that last narrow opening--a grim reward for so much time and effort weaving through some obscure fjord on a reckless mission for any surface ship. By golly you

tions. Whatever realism you choose, the result is a leisurely keyboard game with 30-knot action in bright sunny weather, your destroyer gently moving up and down in the open sea swells.

Who couldn't enjoy such jolly good warfare, even if there are no spectacular visual explosions? This

warned the admiralty about this and you'll be darned if--boom and bloop, you're done before your fit is.

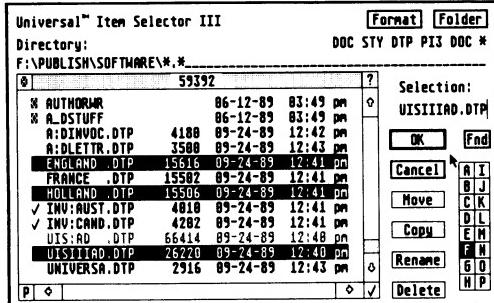
Difficulty levels can be adjusted by toggling on or off spotting the enemy on the map, realistic torpedo loading time, realistic cannon loading time, limited fuel, and limited munitions.

is the Little Destroyer That Could, or the Tank That Went To Sea, a roving shoot 'em up tempered by a few historical constraints.

Launched on the far side of the Atlantic with copy protection, *Advanced Destroyer Simulator* is its own most elusive target--hard to find and impossible to copy (i.e., only for buyer protection, not piracy!). But most of all, *ADS* is fun. So, as damage control rushes to patch another direct hit on your wallet, it's Damn the torpor (and torpedos), full speed ahead!

[Available from Futura (Groupe Loriciel, no address on box, disk, program, or manual). L&Y and presumably other dealers offer at discount price around \$40; retail probably about \$50. Auto loads in low resolution. Plays by keyboard. Copy-protected.]

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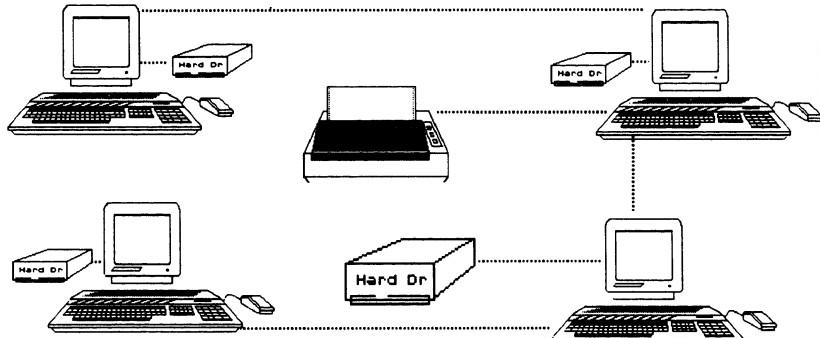
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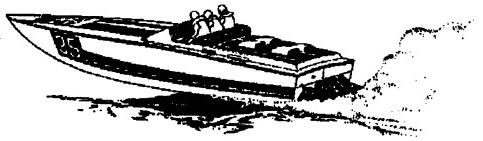
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Heat Wave

A Boating Simulation That Just Misses



Review by Joe Sapienza

Taming the Waters

Have you ever wondered what it would be like to race the big boats you see on Sunday afternoon sports shows. *Heat Wave*, an off-shore superboat racing simulator/strategy program offers various superboats and a variety of courses to choose from. The object is to gain the highest average of points per race. If you do, you will get the crown title of US-1--the National High Point Champion.

Testing Comes First

Heat Wave comes on two disks that can be loaded onto a hard drive. As disk "A" loads, a very simple ditty plays to the opening screen. Included with the program is a three wheel copy protection key. Per the instruction manual, "if Poseidon and other gods of the sea are appeased, the Heat Wave Agenda will appear." At the moment, the sea gods are not rumbling, so we can move on.

The Agenda

The menu screen, or the "Agenda," offers you a myriad of options. These include various graphics modes, the boating course that you will be racing, extra boat parts and gasoline, qualification time trials, driver's meeting information, and the Winner's Circle.

Say "Toy Boat" 10 Times Fast!

There are two types of boats to choose from, Deep-Vs and Catamarans. Both have various pros and cons to them, depending on water and weather conditions. The 27-page manual gives you a basic idea of boat differences that will, along with the information gleaned

from the Driver's Meeting, help you in making a good choice for your ordeal to come.

A Course Is a Course of Course

Six pre-set racing courses are available. Four of these are off shore races in Miami, one is in the San Francisco Bay, and the last on the Mississippi River. The program also offers you a limited custom course design option. The race course, as seen from above, is displayed as you glance through the seven selections, which helps you get a picture of "where the buoys are" that define your course.

Registration Required

You start the program as a rookie driver. You will be prompted to enter your name, and a name for your boat. Once this is done, you must pass the Qualification Time Trials.

You are advised to use the agenda selection Practice Mode until you feel comfortable before getting into an actual race. Boat racing, *Heat Wave* style, takes some getting used to. But the practice will help you develop a winning strategy to get that US-1 rating!

Let's Get Busy!

Once you have made your pre-racing decisions, it's time to make waves! Your view of the waters is shown in the upper left portion of your color monitor. The rest of the screen is filled with the Control Panel. This instrumentation will be vital to completing your chosen course. Besides a clock and a compass, there are gauges for speed, RPMs, and temperature. A trim adjustment and a bilge-pump switch

are also located here, along with the Function Key indicators, F-1 thru F-6.

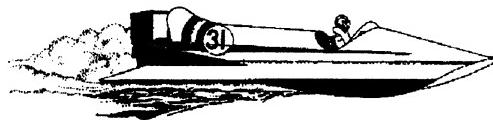
A Navigation screen gives course, boat, and buoy information to help complete your race. A Time Sheet tells you how you're doing in the race, along with any penalties received. There is also a Damage indicator. The Overview, or helicopter mode and the ability to "control" the helicopter--up, down, left, right--is very helpful to getting your bearings, during the race.

Race Results

The graphics in the game are fair at best. It was more enjoyable for me to try to race my boat from the helicopter mode, as it was more visually stimulating. The game is obviously a port from the IBM platform, and we've all been spoiled by the graphics possible on the ST. Sound is also lame, with nothing digitized and nothing more than the ditty and the sound of the motor. The game play gave me no thrills, but I'm not a boating enthusiast. However, I declared that I wasn't a flight sim enthusiast, and *F-29 Retaliator* hooked me and had me going for quite some time.

The race result? If superboat racing is your splash, try this out before you buy. If not, you might be better suited to leave this one standing, knee deep in the water.

[*Heat Wave*, \$34.95. Accolade, 550 S. Winchester Blvd. Suite 200. San Jose, CA 95128; (408)296-8400]



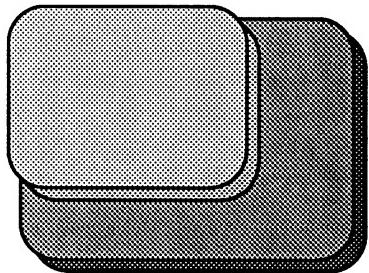
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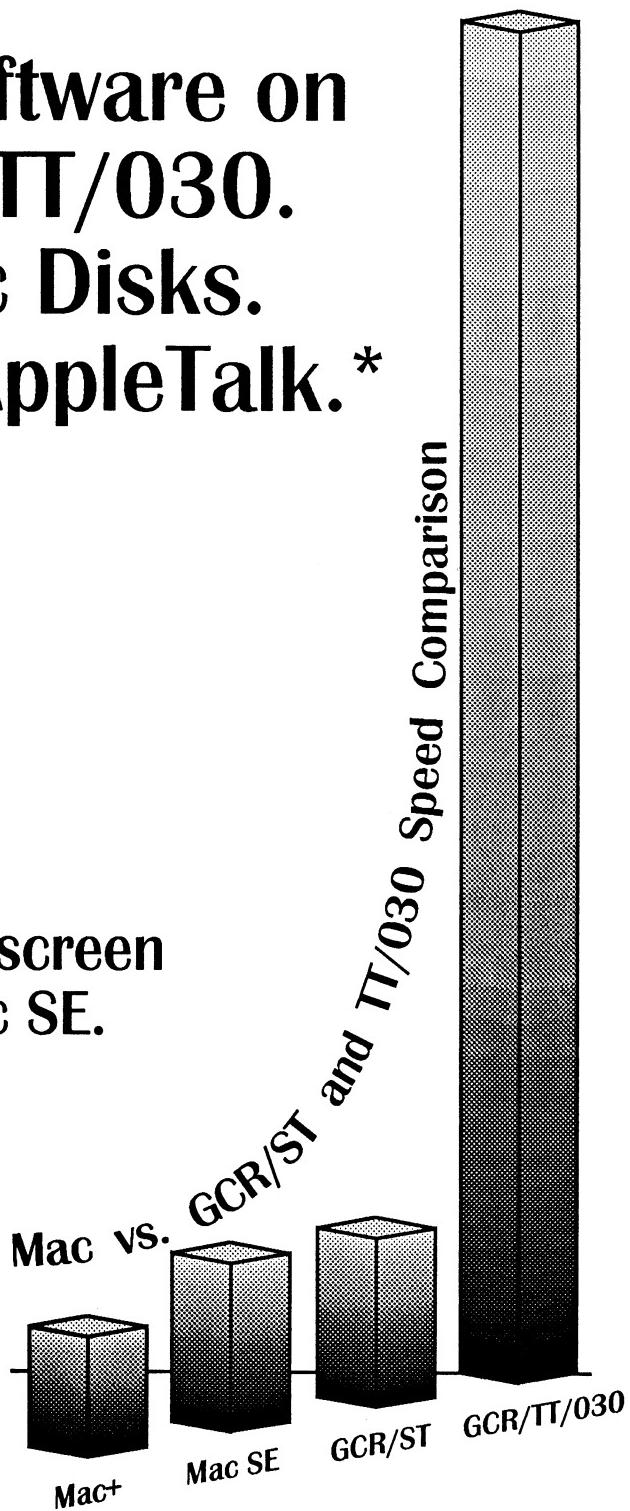
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- Mac+/SE
Screen Size
- GCR/ST
Screen Size

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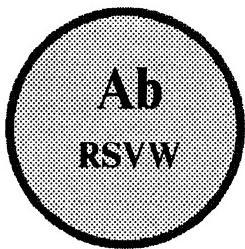


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Abbreviator ST

Review by Sam Van Wyck

"Work Smarter, Not Harder!"

In any business, it's money in the bank when everyone learns to apply this simple rule. On the other hand, all the hustle in the world won't put a paycheck on the table unless it is productive hustle. Thus, for the majority of computer owners who use their Ataris for personal gain as well as entertainment, anything that enhances productivity at a reasonable cost is worthy of consideration.

Such a product is *Abbreviator ST* by Kyle Cordes. *Abbreviator* permits the operator to record almost 500 characters and keystrokes and then have them replay onscreen literally at the touch of a button (or two). Think of it as a macro creator.

A macro represents a way to save repetitious work; specifically, repetitious keystrokes. Type it once, proof it well, since any error here will be forever repeated, save, and it is done. The next time one needs to repeat the series, it is necessary only to recall the macro definition and not the entire text that it represents. For this reviewer, it was necessary to pass beyond three word processors to *WordPerfect* before true macros became available.

Taking a Look at the Program

First, all you people who are saying to yourselves about now, "Well, I'm using a wordprocessor that has macros so I think I'll just skip over to see what Toad has to say this month," just wait a bit. There may be one or two other ways you can use the *Abbreviator*.

Let's assume that in the course of writing for *Current Notes*, several phrases or strings of data tend to be repeated. Each of these is assigned an abbreviation consisting of one to eight letters. Whenever one of these combinations is typed while *Abbreviator* is on, the complete phrase will appear in its place. A sample dialog might go as follows:

The parent company of this magazine is cn. The publisher is jw who, as you see, resides at the same address. The name and address of my esteemed editor is fs. Whenever I need a mailing label for the publisher, I simply type mcn.

Now, with *Abbreviator* switched on, typing the same paragraph produces the following:

The parent company of this magazine is Current Notes Inc., 122 N. Johnson Road, Sterling, VA 22170. The publisher is Joe Waters, 122 N. Johnson Road, Sterling VA 22170, who, as you see, resides at the

same address. The name and address of my esteemed editor is Frank Sommers, 4624 Langdrum Lane, Chevy Chase, MD 20815. Whenever I need a mailing label for the publisher, I simply type

Current Notes Magazine
122 North Johnson Road
Sterling VA 22170.

Since up to 480 characters, spaces and cursor moves (more about that later) are available and may be part of the data represented by the abbreviation, such things as copyright notices, warning labels or other advisories may be conveniently stored for future playback. For instance, an author might wish to place the following at the end of a document simply by typing the four letters shown in the *Abbreviator* edit box:

PIRACY IS ILLEGAL. IT MAY RESULT IN
PERMANENT DAMAGE TO YOUR IN-
COME, REPUTATION AND SELF ESTEEM!

How About Search and Replace?

Although this review isn't intended as a word-processing tutorial, it should be noted that an alternative method of using abbreviations does exist. For instance, in writing a history of air pollution in the Southwestern United States, it would certainly be necessary to mention the city of Los Angeles more than once! To save steps, one might simply type "la" and later do an S & R to convert each occurrence to the complete name.

Obviously, while *Abbreviator* will function well inside any wordprocessor permitting access to the desk accessory bar, its greatest utility is enjoyed whenever such functions as the macro or search and replace are not available. Certainly it would save a great deal of time while online to a bulletin board where time, of course, equates to money. Similarly, a programmer needing to repeat a string of characters might well take advantage of both the speed and accuracy afforded by this utility.

However, It Does Pay to Think Ahead

Naturally, if our hypothetical author is sufficiently versatile to be able to write on many different subjects, she would have to be careful what letter combinations were chosen as abbreviations. Consider the choice of "la" to represent "Los Angeles." No real (Continued on p. 53)

MS-DOS Programs via the ST

by David Aronson

I consider myself to be a fairly unsophisticated computer user, even though I've owned my 520 ST for almost 4 years. After I purchased the ST, I didn't delve into telecommunications for almost a year. I had read about the free software and shareware available on bulletin boards but it took me awhile to take the plunge. I purchased ST-Talk and an Avatex 1200-baud modem (before I knew what a baud was and before I knew that there were advantages to having a modem with a higher baud rate). To make a long story short, I joined the Armudic ST bulletin board and downloaded lots of stuff--much of it pretty useless but with enough gems interspersed to make the effort worthwhile. After a short time, however, I had exhausted Armudic and local ST bulletin boards. (Yes, I know I should have uploaded stuff, but I didn't have anything to upload.) I then started to dial up out-of-State bulletin boards. My wife's reaction to the large phone bill convinced me to curtail this activity (and also convinced me of the virtues of a 2400-baud modem).

I then purchased PC-Ditto for no other reason than to run *WordPerfect* so that I could do some office work at home. I found that PC-Ditto was fine for text-based programs but was essentially useless for games. One night, unexpectedly, I had an idea (at my age, ideas, good ideas, seem to come at increasingly longer intervals). I thought, if I can run MS-DOS software, why can't I download MS-DOS software from an IBM-type bulletin board? After all, I reasoned, my ST can read and write to MS-DOS disks. So next morning, I dialed up a local IBM bulletin board (there's a lot of them out there, folks, and most of them are free) using my *ST-Talk* and my Avatex, and registered as an IBM owner (a white? lie). I did this without using *PC-Ditto*. After a couple of days, I was registered on the bulletin board and given access to its files. I downloaded several programs (including an MS-DOS archive/de-archive program) using X-modem protocol. The file-transfer speed appeared to be the same as that experienced downloading a file on an ST bulletin board. I downloaded the files, which were archived, onto a TOS-formatted disk without using *PC-Ditto* with no problems. I then de-archived the file with an ST de-archive program on a TOS-formatted disk. I copied the de-archived file onto an MS-DOS formatted disk. Lo and behold, the program ran using *PC-Ditto*. Subsequently, I found that I also

could download the files directly onto an MS-DOS formatted disk using *PC-Ditto*. I could then de-archive the file using an MS-DOS de-archiver. (Unless my memory fails me, I think I found that I could also dearchive a file on an MS-DOS formatted disk using an ST dearchiver without using *PC-Ditto*, but I wouldn't swear to it.) A file can also be de-archived on an MS-DOS formatted disk using *PC-Ditto*, but this would be a very slow process.

MS-DOS game programs that won't work on my ST because of the slowness of the graphics run fine on an IBM at my office (Boss, I swear I did it on my lunch hour only once as a test and I'll never do it again).

I now use a RAM disk when downloading to lessen the wear and tear on my disk drive. I find that I can de-archive files in my RAM disk directly to an MS-DOS or TOS-formatted disk.

To many readers, this information is not news, but there probably are a lot of "non-experts" out there to whom this information is news. There is a wealth of MS-DOS bulletin boards in the Washington, D.C. area and across the country. They can provide an almost limitless source of MS-DOS soft-ware. Perhaps some readers who use this procedure to acquire MS-DOS soft-ware can drop me a note in the Armudic mail box and tell me of their experiences.

Abbreviator ST

(Continued from p. 52.)

problem exists until the need arises to write about music. Then we might find the sentence, "The musical scale is represented by the syllables Do-Re-Mi-Fa-Sol-Los Angeles-Ti and Do!" Oops! Fortunately, the function may be switched on and off easily and a really efficient writer would already have abbreviated that scale as "sc." It does help to choose letter groups that won't appear later in the text. *Abbreviator* anticipates this by allowing you to save separate files of abbreviations, one for environmental text and another for music.

In addition to the various letters, numbers and symbols, a number of additional functions may be included in the abbreviated text. The four cursor movements, TAB, Return and Escape are supported.

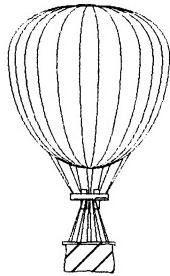
A capture function places any block of 200 characters into the editor. Once unwanted text is deleted, a simple key combination will then recall the remainder.

Abbreviator ST is the product of Kyle Cordes who also wrote the manual. Eleven pages long and spiral bound, it provides about 95% of the information needed to get the program up and working. The balance is easily discovered by the usual trial and error. Copies are available from the author for \$19.95 at 3815 Greengrass Dr., Florissant MO 63033.

Kamikaze Flight Training?

Crash-Course (Literally) in Yeager's Right Stuff

by Mike Heininger (c) 1991



Being a test pilot is one of the world's most exciting and dangerous occupations, but flying a real aircraft can't be much more difficult than piloting any of the 18 designs represented in *Chuck Yeager's Advanced Flight Trainer 2.0 (AFT)*.

AFT's release did not generate the excitement of stunners like *Falcon*, *F-19 Stealth Fighter*, and *Their Finest Hour*. After trying *AFT* at L&Y, I soon found why: the *AFT* controls respond as if they're in a different time zone.

The result is planes you'd like an enemy to train in--kamikazes by default. Even trying *AFT* was annoying--the program demands you first make a copy disk before anything will work. Good for saving the original disk, bad for impressing try-before-you-buy customers.

Later, I thought more about the whole idea of a flight trainer, particularly one endorsed by the retired Air Force brigadier general who first broke the sound barrier and whose name is synonymous with flight testing. With such a pedigree, the program had to be worthwhile.

To be fair, *AFT* is more like *Flight Simulator II* than it is to combat flight simulations. Because *AFT* tries to teach more about actual flying, it is not nearly as forgiving as, for example, the crashproof lieutenant option in *Falcon*.

So, I bought *AFT*, and tried it again. I kept crashing. I tried it again. I crashed some more. What is it? I fumed--me or it? Am I missing something? Surely General Chuck Yeager, the man epitomizing The Right Stuff, would not allow his name to grace The Wrong Stuff.

Alas, unless you have control sensitivity hitherto unknown in the Atari world, *AFT* looks most like APT--Advanced Parachute Trainer. How many ways are there to crash an aircraft? Buy *AFT* and you'll soon find out.

Even more than *Flight Simulator II*, *AFT* demands exquisite attention to controls placement. You'll often be flying more by watching your control icons than by responding to other cues.

From Sopwith to Space Shuttle

Nevertheless, a program can't be all bad that lets us thrill to the varying characteristics of 18 different aircraft. So what if none of them are described in the rather austere 73-page manual. Instead, after you load

the program, a one-screen description appears as each aircraft is selected.

The aircraft are mostly classics: Sopwith Camel, Cessna 172, Piper Cherokee, F-117, F-16, F-18, P-51 Mustang, Space Shuttle (landing only), Spad SXIII, Spitfire V, SR-71, X-1, X-3, X-15, and X-29. Completing the inventory are three canard jet fighter vanities: the XNL-16 Instigator, XPG-12 Samurai, and XRH-4 MadDog--fun for the authors, but less valuable than many real aircraft that could have been substituted.

Start High or Die

One of *AFT*'s best features is the locations part of its missions menu. In *AFT*'s world of 65,000 square kilometers (about 160 square miles), you can begin your flight at any of the following: runway (main airport, ready for takeoff); hangar (of main airport); final (190 feet altitude, ready for final approach to land at main airport); lined up (1,010 feet altitude, lined up to land); 10,000 (10,000 feet altitude, the best place to practice with a new aircraft or new maneuver); obstacles (190 feet altitude, heading toward several miles of obstacle courses with gates and shapes); slalom (190 feet altitude, heading into killer slalom course); canyon (640 feet altitude, heading into gut-wrenching canyon); bridge (190 feet altitude just before a bridge); and airstrip (isolated airstrip with no hangars or towers).

The obstacles, slalom, and canyon demand excruciating airpersonship. The final and lined-up locations provide the best landing practice of any program I know. But to have the best chance of surviving long enough to get the feel of a new aircraft, the 10,000-foot altitude option is the obvious first choice.

Main menu options are ? (to set configuration including sound, time, stars, map detail, and wingmen [on or off]), views, missions, flight training, and replay. After each crash, you'll want to enter replay and select chase plane to see how pitiful your gyrations looked to horrified spectators.

Views is fairly standard, offering pilot, chase plane, lead camera, shadow, target, tower, and satellite. You'll spend most time in missions, which offers demo flight, airplanes, locations, formations, races, and flight training. Replay lets you see exactly how you crashed. Use chase plane perspective to see just how grim it was.

In formations, you pilot the P-51 in basic, sportsman, intermediate, advanced, unlimited, and Chuck

Yeager (i.e., chasing around with him in another aircraft), the F-16 in Thunderbirds, and the F-18 in Blue Angels. At the end of this menu, the curious #1 through #5 selections allow you to record formation flights of your own. I did a formation of four F-117 Stealth fighters looping around the airfield. Get really weird and have four X-3s or X-15s in formation! The custom formations option has limited memory, so select a plane and do something fancy but be brief, save your flight, then add your own formation and select an out-of-plane view to savor your creation.

Races options are 1948 (P-51), 1988 (F-16), fast course (X-29), slalom course (XPG-12), obstacle course (P-51), and clear checked race (meaning, erase your own previous flights to establish new competition; basically, each race you complete can be saved, and then next time you race against your own previous best). Remember to turn on wingmen from the ? menu or you'll be flying alone.

Training Uber Alles

All these menus are glitter compared to *AFT*'s gold: progressive flight training. *AFT* wants you to go through the flight training option item by item instead of leaping into spectacular attractions.

True, learning various *AFT* manuevers ranging from basic turns to the Cuban 8 is not as much fun as chasing bogies in *Falcon*'s corresponding combat manuever menu. But the fundamental goal of *AFT* remains the six-day flight course culminating in opportunities to race around pylons at low level, dodge through a canyon, fly under a bridge (shades of *Flight Simulator II*), or dart about in tight formation either with Yeager or the Thunderbirds.

AFT even includes an audio tape by Yeager, who talks about flying in general, then tells you to open the manual and leads you through the flight training. Skeptical at first, I found Yeager's companionship surprisingly fun and effective in helping me through the slow responses of *AFT* controls.

With or without the audio tape, the flight training course is the best thing about *AFT*. This is the only flight simulator I've seen that shows the control stick positions on screen as the instructor uses them, and allows the student to try to follow these movements using controls marked by smaller symbols.

To take over from the instructor during a maneuver, just strike the [i] key (how logical). Unfortunately, it is difficult to match the fast and smooth instructor moves. Joystick and keyboard combinations are possible, but keyboard only is easiest in spite of keys sometimes having to be mashed to register.

Whatever method you use, control is the Achilles' heel of *AFT* because the response lag with details on is like trying to fly *Falcon* via 1200 baud modem. Control precision can be improved by using shift or control keys, but such complications are not much fun.

For additional disorientation, view rotation often seems to run amok no matter how you try to slow or stop it.

Most items within each day's flight training seem to take about 10 minutes each; expect to take several hours to get through all the flight training. Most people probably will want to mix it up, doing some flight training and then skipping ahead to streak into the canyon and dash themselves to pieces.

AFT allows some absurdities beyond the weird formation possibilities mentioned earlier. The X research planes included here all were air-launched, but in *AFT* you can try taking off in an X-1, X-3, or X-15. You don't have much fuel, so you will go even less farther than from the customary air-launch.

When I took off in an X-1, the nine minutes of fuel sufficed to propel me to 4,085 mph and 340,220 feet altitude, an enormously exaggerated performance worthy of an X-15. So much for *AFT* realism.

But ... it was fun attaining 4,209 mph in the ensuing plummet before recovering at 50,000 feet. And I even landed successfully--which some cynics might consider the most unrealistic thing of all.

The Space Shuttle has no fuel since it simulates only the landing phase of its mission; start it from the runway only if you like sitting a lot. At another extreme, light the F-16 afterburner and try flying under the bridge or through the canyon. If you can fly anything faster than the Sopwith Camel through the canyon, color yourself awesome, dude.

Since each aircraft supposedly emulates characteristics of its real-life counterpart, was it my imagination or does that rotary engine on the Sopwith Camel actually require extra rudder to overcome the torque and fly straight?

In the tape, Yeager says he and *AFT* designers didn't want to overload this program with a lot of buttons and nonsense. Emphasizing "Experience is the most important quality a pilot can have," he adds, "If you love what you're doing, you'll get good at it."

Sure, fine, uh-huh, but ... many people who have been flying other simulators don't want to have to re-learn basic manuevers no matter what the justification. Enter the software testing philosophy of game guru James Sawicki.

The Sawicki Test

As Jim seats himself before an L&Y computer to test the week's latest games, he rarely cracks a manual. If he can't intuitively have a good time and see the game's potential, he doesn't buy it. A harsh test, perhaps, but not totally unreasonable. Jim's opinion of *AFT*? No sale.

AFT has some nice touches, e.g., the colors are bright, most airplanes look pretty good, view rotations are interesting but dizzying, pressing the C key catches up in formation flight when you lag the group

maneuvers, and sooner or later you learn to stay aloft not so much by intuition as by flailing around the control indicators on screen.

Hard to Like

Ultimately *AFT* is hard to like unless you really work at it. The excellent step-by-step training and varied aircraft handling characteristics are handicapped by jerky control and screen response, which, like *Air Warrior*, does smooth out if, in the configuration menu, you turn off details like sound.

Originally developed for IBM-compatible computers, *AFT* in its manual mentions main DOS variations from EGA to VGA but acts like a slow early DOS product that can't keep up in Atariland.

If you can tolerate slow operating response and want detailed flight instruction, *AFT* merits serious consideration. But if you are impatient and insist on smooth-scrolling simulators, stick to classics like Spectrum Holobyte's perpetual leader, *Falcon*.

Available from Electronic Arts, P.O. Box 7578, San Mateo, CA 94403-7578, telephone (415) 572-ARTS. \$49.95. Requires double-sided disk. Joystick optional. Runs on 512k. Not copy-protected but requires typing password from manual. An initial attempt to run it from a hard drive produced a crash.

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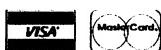
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Nicprint 3.2

A Must If You Use Neodesk

Review by Anna M. Mason

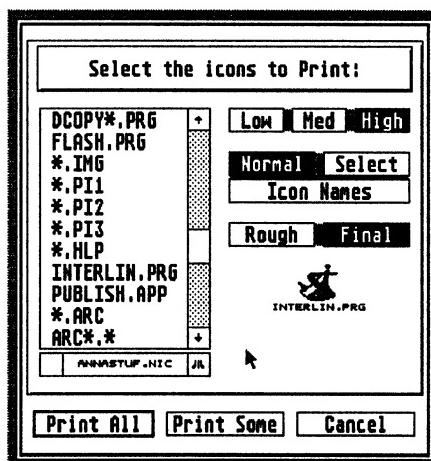
How to Get Hooked

After upgrading my computer system a few years ago from my trusty old Atari 800XL to a 1040ST, I soon grew tired of the bland-looking GEM Desktop. During one of our club's ST SIG meetings, I saw a demo of a fairly new product called *NeoDesk* and I knew I was hooked! By the time Gribnif Software released version 1.3, I was a registered owner. It has since become the standard by which all other desktop utilities are measured. In PD libraries and on BBSs around the country, you can now find hundreds of *NeoDesk* icons that are available for a small price or a simple download. A little over a year ago, I sent for Gribnif's own icon disk. (WOW! 400 on one disk! I know, I know. But I'm like a little kid when it comes to getting new things for my computer.) Someone had obviously spent a lot of time and effort, pointing and clicking, to design all of them. The variety was amazing.

Conquering Frustration

Enter my dilemma. With such a large and ever-growing library collection of icons, trying to find which disk a specific icon was on proved frustrating to say the least. But wait! There, tucked away in a folder on the Gribnif disk, was something called *NicPrint.PRG*. With curiosity being one of my lesser evils, I double-clicked on the .DOC file and was surprised to see that it would print a hard copy of all those icons! To make a long story short, the program worked as advertised. Since it was shareware, I sent the author a donation for his work along with a couple of suggestions/requests. (BTW...you DO sup-

port our shareware folks, don't you? If not, shame on you.) About a week later, I received a very nice letter and a new, improved version of *NicPrint* with all of my suggestions implemented! Since then, Joseph Reiss and I have become pen-pals. *NicPrint* is now up to version 3.2 and I think it is worth more than Joe's requested \$10 donation.



Multi-Uses

When the program is run, you must first select the .NIC file name you need from the GEM file selector box (or UIS III if you own it). While it will print out a hard copy of all your *NeoDesk* icons, as I mentioned above, you can also print just one. This is ideal for making disk labels and using that particular program's logo (i.e. Interlink icon shown in the illustration) for your backup disks. You have the choice of three sizes (LOW, MED, HIGH) which, as you might have guessed, are the available ST resolution modes. If you use *NeoDesk*, you are aware that, when you double-click on an icon, its appearance changes to show that it's been selected. So, your next op-

tion is choosing which status you want to print by clicking on the NORMAL or SELECT (or both). ICON NAMES lets you decide whether or not you want the name printed beneath the icon itself. While this is useful when cataloging your files, I prefer a nameless icon for my labels. The ROUGH and FINAL print buttons are self-explanatory. To the left of the options is a scrollable window displaying the icon names for whatever file you have loaded, with the filename itself listed below. To see a presentation of what the icon looks like, double-click on the name and it will appear in the blank space to the right of the dialog box. This is very handy because there may be several icons with the same name but a slightly different appearance. Double-clicking on the filename allows you to load another .NIC file and continue with your printing.

High Praise for Joe Reiss

If you are, like me, a fan of *NeoDesk*, this is one utility you should not be without. The author deserves the highest praise for the user support he has shown. He has never failed to answer my letters or implement an idea. (For a non-techie person this can be very flattering, indeed!) To obtain your copy of *NicPrint* 3.2 which supports the older versions of *NeoDesk* as well as the new 3.0, send your \$10 donation/registration fee to:

Joseph W. Reiss
65176 Beeham Run Road
Lore City, OH 43755

(Don't forget to tell him that Anna sent you.)

Stunt Car Racer

Review and Hints

by Evan Lauber

A Live One

Stunt Car Racer is one of my favorite games. If you like racing games, you'll get hooked on this great cross between a simulator and an arcade style game.

The graphics are very good, and scroll smoothly. The perspective is from the windshield. You play on a variety of imaginary futuristic race tracks which resemble roller coaster rides.

This is usually a one player game. You can play with other players and keep their best lap and race times on your disk as well, but only one player can play at a time, unless you hook up two ST's with a RS232 cable. Then two players can play against each other! This would be the ultimate stunt car racing experience if both players were equally skilled. I have yet to experience this!

One of the reasons this is my favorite race car game is because it allows you to save your best lap and race times, adding greatly to its competitiveness. The game requires attention to detail, exact joystick movements at precise times, and memorizing the track. As you practice, you will soon see, that at each turn, jump, or top of the hill, your car must be traveling at a precise speed. If you go too fast or too

slow you land in the wrong place on the track. You quickly start to look at your speedometer and memorize the speeds that work best for each location.

Some Advice

There are four divisions, and you will need to practice all of them, but for your best chance in moving up in your racing career, try some of the following.

First, practice one division (skill level) at a time. Each division has two tracks. The first track is always your first race. Regardless of who wins, you go on to your next race on the second track, then regardless of that outcome, the third race returns to the first track.

You compete against two computer drivers in each division, but only race against one at a time. Whoever has the highest points at the end of six races goes on to the next division.

I ended up using practice mode on the second race a lot, for every division. Why? If you lose the race there is little incentive to go on to the next track. You start again, trying to master the first track. Thus, the second track is something of a continuing mystery, wisely approached in the practice mode.

Now for Some Clues!

Now these are not just anyone's clues. You see, today I made it to the super league! The manual doesn't give too many details on what happens there, but if you are good enough to go all the way to division one and win, which is hard, very hard, to do, then you discover this whole other league. It has faster cars, and better opponents. Though all of the tracks are the same as the other leagues, they become a new challenge in a faster car!

It is important to try to get ahead of the ST's computer car as soon as possible. To do this hold down the fire button, while keeping the joystick forward, just before your car lands on the track at the beginning of the race. This will put you out in front, unless you're facing a superior opponent. Try to hold down the button (nitro, with flames!) as much as you can, but don't waste it. You can eat it up too fast and not have any left for the last few moments of the race! When you are in the air don't use it, and when you are slowing down don't use it, unless it's critical to slow down real fast! When you first start the nitro, keep the joystick forward to start the acceleration. (Units of nitro are shown in

the lower left hand corner next to the letter B, probably for booster rockets. I call it nitro.)

Save Your Best Times

Make sure you have a formatted disk as a data disk; use this to save your best times. Save them onto a file called, "Hall." This is your Hall of Fame file. After each promotion to a new division, save your position. Make sure you save it right after the promotion, or you might have added holes to your car needlessly. Unfortunately, each time you save your position, when it loads up it is at the first race of that division, no matter where you saved it.

Dealing with Damage

Every time the computer's car hits yours it will put a crack in your car's frame. This is usually not a major problem unless you are a very reckless driver (like me). While driving, you will hear the cracks, and see them on the top of the screen. If they go all the way across, then your car is totaled.

Deadly Holes

Cracks can mess up a race but not your career. After each race, they are repaired and your car starts off with no cracks. This is not true, however, for holes! Holes in your frame show up on the right corner of your monitor. They come from very big accidents. You will never get one from another car hitting you unless he manages to ram you off the track. Computer cars can ram *you* off, but you don't have a chance of ramming *them* off the track, so don't waste your time.

But it is possible to land on top of your opponent and squash him. Try to land on him during a jump! You will always know just how far away you are from your opponent by quickly glancing at the lower left hand corner. There will be a number; if it starts with a minus, he is that many car lengths behind you, otherwise he is in front of you.

When you finish a lap, it will display the lap time. If you currently have the best lap time then that money bag lights up!

Totaling your car only happens when you fall off the track, make rough landings, or you collide with the computers car too often. If you have too many holes your car will handle like it belongs in a junk yard.

After every race, the computer will tell you if you beat any of your personal record times, and if you beat your computer opponent (or real player in that special setup I mentioned). If you win the race, you get two points. If you get the best lap time for the race, you get one point. Best lap times are rarely had on the first lap, as your car starts the race from a complete stop. Each race has three laps. Make sure you load your hall file and your position before playing!

Since this game requires total concentration, you will find that you have good days, and bad days. On the bad days, give yourself a break in between races and just concentrate on developing skills and new techniques. Wait for another day to race.

Now for the best undocumented cheat! If you want to give up on a race, hit [Esc]. This will only work when your car is on the track, or above the track on the chains. Once you have hit [Esc], you can go on to the next race by using the joystick and fire button, or you can forfeit each race and start the division over at race one! I do this all the time on the first race when I know I am going to lose and sometimes during the middle of the divisional races when I have more holes in my car than an old pair of my dad's underwear!

Finally, the Biggest Hint!

Hold down [F1] while hitting the space bar, keep hitting the space bar until you get to the load / replay option, then move the joystick to it and fire on it; next, fire on replay, then on start game.

One final touch, when driving, do not look at the sides of the road. (I know they are thin, but you will get used to it!) Try to look ahead of you on the road as much as possible. This is because the game has an automatic feature. If you are going straight ahead and the road is not curving and you are very close to the edge, do not move your car to straighten it out! Why you ask? Because you can not fall off a straight road.

Try to anticipate turns and begin turning just before them. Let go of the joystick at the end of the turn, rather then counter steering. Sometimes you might have to slow down at turns just for a millisecond. You will find that you need to keep the joystick forward to start accelerating, but the car will keep going full throttle even without the stick forward, until you pull back.

Some turns require you to slow down by holding the stick in between the down and left / right positions.

That's it. I think I have given you guys all of my hints. If you ever do make it to the super league, please let me know. It might be fun to duel it out at a club meeting some day! Make sure you buy this program. It is well worth the money!

Track	Lap	Race
DrawBridge	1:13.27	3:35.11
Ski Jump	46.28	2:23.88
R. Coaster	1:16.85	4:04.30
High Jump	48.37	2:29.96
Big Ramp	48.84	2:31.49
Step. Stones	55.10	2:52.17
Hump Back	53.44	2:50.47
Little Ramp	43.69	2:22.57

These times are not for the super league, I know those times will be much better as the car is faster! Once again, I love competitive games like this. It kind of brings me back to the good old eight bit days where I used to save my best times and high scores on *Summer Games*. If you have any questions, feel free to ask me. Take care, and good luck.



The Duel

Auto Racing Sequel To Test Drive

Review by Milt Creighton

Black Barney Drives Again

I was really excited to see this game appear for the ST. The original *Test Drive* (TD1) was an early gaming favorite even though it didn't have the stamina to maintain its initial head of steam. Despite its superior graphics and smooth action there just wasn't enough variation in TD1 for the long haul. Such is not the case for *Test Drive II*. Where TD1 only offered the gamer an opportunity to push a high performance car up a winding mountain road, TD2 goes well beyond that by offering varying terrain types, more difficulty levels, more numerous road hazards, and an optional computer opponent -- thus, the game's title. Of course, you can still race against the clock if you prefer. Also, there are automatic and manual shift options, great graphics, and terrific animation. It's really quite a package, even if it does have some problems. That legendary cross-country racing driver, Black Barney Olfield, would have been proud of it.

Getting Started

Once the game is booted and you get past the off-disk copy protection and the title sequence (which is pretty nice, by the way) you are deposited at the main menu screen. The main menu permits you to select between racing against the clock or against a computer opponent. To facilitate or vary these two basic options other menu choices offer the opportunity to select the car you will drive and one for your computer opponent (if you choose to exercise that option). The choices of cars are limited in the basic game: either a Porsche 959 or a Ferrari F40 (if you could

possibly call either of those machines limited!). If you find these choices too confining you can purchase an additional car disk called *The Supercars* (\$21.95) that will provide an additional five cars, including a '88 Lamborghini Contach 5000S and the incredible Porsche 911 RUF among others. The manual also mentions another car disk called *The Muscle Cars* which was available for the PC-based version of TD2. It supposedly includes five cars from the '60s such as the Pontiac GTO, a Shelby GT, and a Corvette Sting Ray. There is no mention of this last disk in the Accolade press release, however, so it may never be available for the ST. The game is controlled either by the cursor keys or the joystick. There is a pause feature but there's little opportunity to use it.

The Course

The basic game is conducted over the Master Scenery highway course. The Master Scenery course is divided into six road sections offering three different types of challenging terrain. The sections vary in length but they average about six miles long. The first section is a stretch of desert two- and four-lane highway with many long straightaways. The muscle cars obviously have an advantage here. The second section climbs around the right side of a mountain. There are some straight-aways to complement a couple of nasty curves (sheer drops with no guard rails!) and three tunnels cut through the mountain. Watch the last curve; it's a killer.

The third section is a winding tree-lined stretch of highway with a few speed traps. There are several types of speed traps so you have to

make very quick decisions about whether to trust your speed to outrun the police or pull over and good-naturedly (right!) get your speeding ticket. Waiting for your ticket eats up time, but it doesn't cost as much as a crash. The fourth section climbs the left side of another mountain and includes more cops and a nasty undocumented feature (sometimes called a bug) just waiting to pounce. More on that later.

The fifth and sixth sections are another desert scene and another windy tree-lined country road, respectively. Suffice it to say that the hazards you discovered in the previous sections are compounded here. The roads are more windy with few straight stretches (more agile cars have the advantage here), lots of speed traps, and unexpected rises that restrict your visibility.

Scenery Disk

When you tire of the Master Scenery Course you can purchase *California Challenge* (\$21.95) that features seven stretches of California highway from the Oregon border south to Mexico. The views include a drive past the Trees of Mystery, speeding through the forest and seashore around Eureka, on to San Francisco and the Golden Gate Bridge and finishing in Old Mexico. The scenery is spectacular with views of giant redwoods and sandy seashore. It could have given TD2 a new lease on life once you'd mastered the basic course, but, unfortunately, it is very buggy. There are invisible cars you smash into, making it almost impossible to complete the course, much less achieve a significant score. I don't recommend it in its present state.

The Object of the Game

Whether you are racing against an opponent or against the clock, your goal is the same. You want to push your car through each section of roadway as quickly as you can without crashing, getting a ticket, or running out of fuel--all of which add a 20-second penalty to your run. If you are racing against the computer, you want to get to the finish line before your opponent. The finish line for each interim run is a gas station, just like TD1, but the difference in TD2 is that you must stop between two white lines and on the right side of the highway. Stop before that and the time keeps running; go past the second white line and you incur a 20-second penalty for running out of gas. Each crash also adds a 20-second penalty. If you run out of lives before you finish the course or run into the rear of a police car, the game ends.

Road Hazards and Stuff

To make the game challenging TD2 adds a number of road hazards such as traffic (both oncoming traffic and traffic moving in your direction). In addition, there are potholes and oil spills that provide a few moments of real white-knuckle panic. You can strip a gear by improper shifting or blow your engine by redlining the tach for too long a time or blow your steering and transmission by hitting too many potholes or rocks along the side. The game gets harder as you increase difficulty levels. At the lowest difficulty level the police cars have a top speed of 120 MPH, traffic speed is 30 MPH, traffic density is rated at 50% of maximum, and your opponent's speed (should you select that option) is limited to 90 MPH. You only get 33% of the points scored during the run, however. On the other hand, at the highest difficulty level the police cars can go up to 200 MPH, traffic speed is 60 MPH, traffic density is 100% of maximum, your computer opponent can attain

the maximum speed his car allows and you get 100% of the points scored during the run. Point scoring does improve with game play. After some practice I was able to score better than 320,000 points over the Master Scenery Course with the Porche 911 RUF and better than 310,000 with the Ferrari F40.

Bugs and Other Unfortunate Features

Yes, there are some bugs. The game is a port after all. I have played it extensively on both my 386 PC, on my 1 megabyte 520ST, and my T16-equipped MegaST4. I also tried it on an unmodified

*...high on my play list
for years to come.*

520ST. The game would not load or run on that machine. On my 1 megabyte 520ST the controls are almost unacceptably sluggish and the animation jerky. On my MegaST4 (equipped with a 16 MHz accelerator board) the game performed at least as well as on my 386 machine. I also found that TurboST can make a significant difference on a 8 MHz, 1-Meg ST by improving the responsiveness of the controls and smoothing the animation. As for the bugs, it appears there is something wrong with the images of oncoming traffic on the fourth section of roadway on the Master Scenery course. The effect is that you can crash into invisible oncoming traffic on that section of road. In addition, I have also noted on at least one occasion that I drove right through an image without crashing. A similar problem occurs on section six where oncoming traffic suddenly appears in your path without warning. In section two you may find your car being drawn irresistibly toward the wall of the tunnels, just as you exit, for no apparent reason (although an invisible oil spill may be the culprit). Also, the right half of your car does not seem to exist as far as the

program goes, allowing you to crowd the center line and even slip right between two cars if you do it just right. None of these "features" appear on the 386 version so I doubt they are intentional.

On the Bright Side

The graphics are superb, miles better than the EGA graphics on the PC and (to my taste) better than the VGA graphics in the unfortunate PC sequel *Test Drive III--the Passion*. The sounds are quite well done, too, especially the sounds of the engines. They actually sound like the engines of the automobiles they represent. (Well, at least that's the way I'd like to think some of them sound.) The single exception is the sound of the police sirens. It's pretty awful, but I guess they didn't have much audio processor left to work with after the engine sounds. The animation is mostly well done, too, provided you have improved the graphics handling capability of the ST. Aesthetically, there's a lot to commend this game. That's not so surprising either since the same could be said of TD1. If anything, the scenery disk is even more impressive.

The Bottom Line

The Duel--Test Drive II realizes the potential that *Test Drive I* promised but didn't deliver. The many options will keep this game fresh for months or years to come. It offers a fair challenge to youngsters with hair-trigger reflexes as well as to those of us who can bring only enthusiasm and years of driving experience to the game. There are some problems with this game, most of them probably associated with the port over from the PC machines but we end up with a superior version in spite of invisible road hazards and tinny police sirens. The add-on disks are well worth the cost because each one renews the game and adds additional challenges. Accolade has a winner here. This one will be high on my play list for years to come.



Showdown Hockey

If You're a Hockey Fan, You'll Love This



Review by Bob Berberick

Summary: A one or two player game for Atari 8-bit Computers (minimum 48K). One disk drive and joysticks required.

Features:

- Computer Goalie or Skater
- 1 or 2 Player competition (against computer opponents)
- 2 Player head to head (skater on goalie)
- Computer goalie and skater skill levels
- Slapshots, Wristshots, or Deke (whatever it takes to put it in the net)

To the best of my knowledge, there was only one hockey game for the Atari 8-bit. I remember the game (because it was awful) but I can't remember the name (I try and forget unpleasantries). [Editor's note: sounds to me like Bob is referring to Gamma Software's *Hockey*, a game with horrible sound effects and players that looked like praying mantises. - BLP]

Enter Showdown Hockey

This game was written by a local lad (Hamilton, Ontario, Canada) named Paul Aussem, using Action! His first release, *Blockaboo* (a two-player Tetris-type of game), is a favorite that I play regularly.

The program auto loads while you hold down the OPTION key. Once the loading process is complete, you are greeted by a good rendition of the music from "Hockey Night in Canada" (which probably means nothing to you US folks). After the opening screen/sound completes its "job," you are greeted with the Options Menu. This is where you get to choose if you want to be a skater or a goalie;

a one- or two-player game; or how many shots per match etc. If you sit there like a bump and don't do anything, the program starts a demo for you. Nice touch.

Now, about the manual. I always try and run a program without using the manual, and this was no exception. I almost made it, too; the only thing I couldn't figure out was how to place the shots. After consulting the slightly cheesy one-page manual, I figured it out; it was really quite simple. (In all fairness to the docs, it does provide all of the information needed and hey, what do you expect for \$16.00!)

Okay, now that you've chosen the options, you press the fire button and are presented with a display representing one end of a hockey rink with a skater at the blue line and the goalie at the other end. The scenario is a "break away" with one skater against the goalie. If you chose to be the skater, you stare down the competition and, when ready, push the joystick up and away you go. Next, you move the joystick in the direction you want the shot to go and either let go a blistering slapshot or try and Deke out the lout in the net. The computer decides if it is a slapshot or deke by how close you are to the blue line. Another nice feature is that the display shows who is the player and who is the goalie at the start of the competition, just so you don't get confused. Assuming you are the skater, you let go the shot and hope to turn on the red light. After the first shot, you are given a running display of the number of Goals/Saves. At the end of each round you are rated on your shots or saves percentage. You

could be anywhere from "You Stink Big Time Pal" to "NHL All Star."

The graphics are quite good with excellent joystick response. I just love the goal tender: he has some amazingly realistic moves. Sound is so-so; it gets the job done, but it's nothing to write home about.

Overall, I think *Showdown Hockey* is quite a good game that's very playable. If you're a hockey fan, you'll love it. If not, I think you'll still like it. Try playing this game with a friend: it's more fun and challenging that way.

For the paltry sum of \$15.95, I unhesitatingly recommend *Showdown Hockey*, and, although this is not a review for the author's other game, *Blockaboo*, it, too, is top shelf. Now, lest you think my recommendation might be biased by the fact that Paul is a local programmer, rest assured, it isn't. If you try these games, I'm sure you'll agree they really are worth the money. I'm also pleased to report that Paul also has other projects in the works for the 8-bit Atari and is very receptive to new ideas. Is he the only one on this continent?

\$15.95 U.S., available from: American Technavision, CA; B & C Computervisions, CA; Horizon Computers, Denver, CO; San Jose Computers, CA.

If you have any questions or comments regarding this program or wish to make a suggestion for a new program, please contact the author: Paul Aussem, Aussemware, 75 Queen Victoria Drive, Hamilton, Ontario, Canada L8W 3E3. (416)575-9810.

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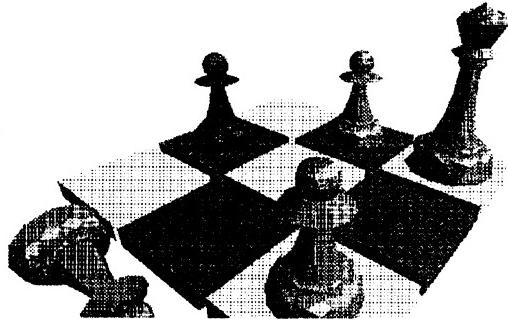
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Chess Anyone?

Chessmaster 2000 for the 8-Bit User

Review by David J. Harris

(Seoul, Korea)



I'll be honest, I love chess! So, when I saw Software Toolworks *Chessmaster 2000* going for \$12.50 from American Techna-Vision, I felt it was time for a review of one of my all time favorite programs.

Chessmaster 2000 is really a bargain for \$12.50, especially when you consider I paid \$29 for it back in 1986. (You remember, way back in the dark ages when major software companies used to actually release software for the Atari 8-bits?) I find it really annoying that Atari can release 15 new titles for the 7800 and the 2600 and nothing for the 8-bit line. Anyway, *Chessmaster 2000* has everything the chess connoisseur could want: it's powerful, well thought out, and user-friendly. As my game improved, I really came to appreciate the many features built into *Chessmaster*.

3-D Chess

One of the first things you notice about the program is the 3-D pictures of the chess board on the packaging. While the 3-D board has its drawbacks, it does show what the 8-bits are really capable of in the graphics department. Most software only scratches the surface of what the 8-bit line can actually accomplish. All one has to do is take a look at the great games available for the Commodore 64. The beauty of the 8-bit computer is that you don't need a \$300 monitor like the ST or Amiga. I know from experience there are thousands of computer peasants out there like myself who have to get by on second hand color sets.

The 2-D board--like the 3-D board--is also excellent, one of the best looking boards I've seen on any machine. Which means it is easily the best looking of all my Atari chess programs. The 2-D mode is what you'll want to use for serious play. The colors are pleasing, and the pieces are easily distinguishable. For those with a black and white TV or mono monitor there is even a color switch off mode for improved clarity.

100 Historical Games

The manual gives a brief summary of the rules of chess and even suggests a few simple strategies. One hundred historical games are supplied on disk so you can watch each match as it was actually played. I rarely understood the strategy involved, but they sure

are fun to watch. The manual gives a brief description of each game and the effect it had on the development of chess. To top it off, there is even a short, but informative, handy pullout instruction set.

Chessmaster 2000 is an excellent learning tool since it comes with a handy teaching mode that highlights the legal squares for the piece you are attempting to move. If you are having trouble with your strategy and can't decide where to move, *Chessmaster* will even suggest a move for you with its hint mode. As if this weren't enough to get you started, there's even a Coffeehouse mode that makes the computer play as a beginner does: "stupid."

Playing the Game

Play levels are based on time per move, and there are 20 different levels from which to choose. Levels range from as little as nine seconds per move to infinity. The upper levels are ideal for evaluating moves; just set up the situation and come back in a couple of hours--or days--if you want to see the solution.

Commands for setting up *Chessmaster*'s many options are fairly easy. To activate them, you just hit [Ctrl] plus the corresponding letter. [Esc] toggles you between the board and the menu screen. You can take back moves, replay the game, switch sides at anytime, watch the computer play itself, print out games, save and load games, shut off the computer's ability to think during your move, and solve for checkmate.

Against the Competition

To see how well *Chessmaster* performed, I tested it out against my collection of other chess programs.

First test: could it defeat my Radio Shack hand held unit? No sweat, my poor hand held unit did not know what hit it. The Radio Shack unit lost on every level except for the first level. Never figured that one out. *Sargon III*, on the other hand, beat my Radio Shack on every level.

Next, I brought on my other 8-bit challengers. *Odesta Chess 70* was the first to be sacrificed in combat. It played well, but always gave up a piece or two advantage to *Chessmaster* and was unable to recover.

Mychess II also put up a good battle but lost just as *70* had. The similarities between *Mychess* and

Chessmaster are uncanny. It almost seems as if *Chessmaster* had been copied from *Mychess II*. I am still curious to see if *Mychess II* was purchased, revamped, and renamed *Chessmaster*. Probably just my imagination.

Just for a laugh, I even booted up *Parker Brothers Chess* and *Sargon II*. Needless to say, they were quickly annihilated. So now it was on to the ultimate test, *Sargon III*. Payback time for the thrashing *Sargon II* took.

Both *Sargon III* and *Chessmaster 2000* claim to be superior to the other. Well, I was unable to name a clear winner. After several games, they ended up playing to one win apiece and three draws. The wins seemed to be flukes while the draws usually had one program jumping out to an early lead only to have the other program catch up in the later stages of the game, which would then ultimately end in a draw. Of course, this was only a five game series, so your results might be much different than mine.

In the playability department, I would rate them even. It was fascinating to watch both programs play with their unique styles. The graphics display was the only area where *Chessmaster* was actually superior.

A Few Complaints

The few complaints I have about *Chessmaster* are that it lacks a time clock, pieces captured mode, and a workable joystick mode. I also think the command keys could be a little more logical. On the other hand, there are so many different commands that this problem seemed almost unavoidable. These shortcomings were probably corrected in *Chessmaster 2100*, but we Atarians, unfortunately, will never know.

But Still--a Best Buy

Chessmaster 2000 is not the kind of program you will outgrow as your skills increase. So, if your current collection of 8-bit software needs some new life, check out *Chessmaster 2000*. It has to be the best 8-bit chess game value around.

[Editor's Comment: you might want to dig out the June 1987 issue of CN and compare John Crowell's review of *Chessmaster 2000* for the ST on p. 34 to Dave's comments for the 8-bit version above. Another very recent review of *Chess Player 2150* by George Hulseman in the April 1991 CN (p.68) puts *Chessmaster 2000* and *Sargon III* into perspective versus the most recent---and powerful--16-bit chess games. -BLP]

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Three Printers in One

Epson Laser Printer

Reviewed by Clark Weissman

Like many of you, I've vacillated for the past few years on buying a higher quality upgrade to my Panasonic 1091 9-pin dot matrix printer. Major concerns were compatibility with my "off brand" Atari 1040ST and all the different software packages I use, and cost. Well, I took the plunge after considerable study and purchased a perfect solution, the Epson EPL-7000. My positive experience should be of interest to ST users.

Compatibility And Cost

The EPL-7000 is really three printers in one. It emulates the HP LaserJet IIP (PCL 04), the Epson 24-pin LQ series (2500-500), and the Epson 9-pin FX series (86e/286e-80). As you may know, the Panasonic 1091 emulates the Epson MX/FX series printers, so all ST software that uses the defacto Epson MX/FX 9-pin printer standard is compatible with the EPL-7000. This was one of the most compelling reasons for my purchase, as I was assured that all my ST software would work on the printer out of the box. And it did!

The street price for the basic 512K EPL-7000 is circa \$900, but further shopping can find even lower prices. I paid \$848 at Jade Computer in Woodland Hills, Ca. For graphics and desktop publishing you need at least two megabytes of memory. That runs another \$300-\$400 with the HP LaserJet II series. Not with the EPL-7000; the controller board has sockets for two megabytes of memory and is very cheap to upgrade. I paid \$75 for the 1.5 megabyte upgrade bringing my net cost to \$923, significantly less than the HP IIP, the Atari SLM804 used, or the new SLM605. The EPL-7000 can be fully populated to 6 megabytes with an expansion board, and the EPL-7000 can be upgraded to the higher performing (and significantly more costly) EPL-7500, which integrates a high-speed RISC processor to increase processing speed for the resident Adobe PostScript (version 52.3).

Operating costs are competitive with other printers. The EPL-7000 uses a toner-drum replacement cartridge for ease of maintenance. This is the same approach used with the HP L-Jet2P. But the cartridges are not compatible. The spec sheet indicates the cartridge will last 6000 sheets at a street replacement cost of about \$100 per cartridge. The purchase price included a cartridge. The EPL-7000 comes with a two year limited warranty from a major name in computing, EPSON, so long term support is assured.

Performance

The EPL-7000 uses a 12.5MHz Motorola 68000 microprocessor engine and produces six pages per minute. The EPL-7000 only requires about one minute to warm up after a cold start, faster than my ST takes to boot. There is a large capacity 250 sheet paper tray positioned in front. An optional rear mounted tray is available for straight through printing of labels, transparencies, and cardboard up to 42 lb. paper weight.

The printer comes with 14 built-in resident ("RD") fonts: Courier normal, bold, italic in 10 or 12 pitch (characters per inch) both portrait and landscape. There is an EDP font in 16.6 pitch for portrait and landscape. This is equivalent to the 9-pin "compressed" font useful for crowding 132 characters per line for spread sheets or legal "fine" print. The EPL-7000 accepts one LaserJet IIP font cartridge plugged in the rear right of the printer. This is labeled the "C" slot. There is also an "A" and a "B" slot of a different media format for future Epson expansion. My purchase during a sales promotion included a free 65-in-one font cartridge from UDP Data Products providing Courier, Prestige Elite, Letter Gothic, Times Roman, Helvetica, and Lineprinter (compressed). One Letter Gothic font comes in 27 pitch, i.e., 216 characters per line. Wow! There are over 60 font cartridges listed in the EPL-7000 manual from eight different suppliers, which extend the printer into other fonts, tax forms, bar codes, equations, plotter, and even PostScript capability. You can also download ("DL") fonts to printer memory. It is truly exciting all the options presented.

My notoriously loud Supra hard disk covers any sound from the printer. However, the EPL-7000 is very quiet and fits well into the home where late night work might wake the rest of the family.

Physical Characteristics

The 40 lb. EPL-7000 is a solid, cream color, almost beautiful product, whose (19.5" w-15" d-7.3" h) footprint is only a little larger than the Panasonic 1040 it replaced in the same small 20"x25" area of my desk. The parallel Centronics-compatible printer cable was unplugged from the 9-pin and plugged in the back right of the EPL-7000 without problem. The EPL-7000 also supports a serial RS-232C or RS-422A interface, and surprisingly, both at the same time. The printer will accept data on a first-come basis from either interface. This eliminates the need for a two-com-

puter "A-B Box" switch to share the printer. A nice touch. You need more than the basic 512K memory to exercise that feature.

Initial Setup and Operation

The printer was easy to set up. The 320 page User's Manual is divided into appropriate chapters that lead you through unpacking, setup, adjustments, built-in self-test, connecting to your computer and software. There's an extensive trouble shooting chapter, a chapter on technical specs, and three appendices on expansion options, fonts, and emulation modes.

The printer comes with the one 250-sheet tray that locks on the front of the printer. One lever permits paper loading. Single sheet feed is via a slot on top of the tray. Very simple.

Connecting the printer to the 1040ST was the same as for the Panasonic it replaced. Just plug in the Centronics cable. The printer does not come with a printer cable.

All printer controls, after power is turned on by a right rear rocker switch, is via four micro switches, the 20 character LCD panel, and the "N-S-E-W" compass buttons. The micro switches permit switching between "On Line" and "SelecType" controls, to "End" multiple copy printing, to "Feed" any incomplete pages, and to "Reset" the printer to the same state that is left by the power-on boot. The LCD panel always tells the printer state. On boot up, the LCD reports as the printer cycles through its boot health check--memory available, warming, ready.

The N-S-E-W compass buttons permit navigation and function selection down a tree structure of various printer options, functions, and settings. It's amazing how many choices are possible with so few controls. This is perhaps the most confusing part of the set up. A Quick Reference card is provided to help the navigation. One of the four micro switches "SelecType" permits access to the LCD control panel. There are two levels: Level 1 allows the frequent accesses to the fonts, number of copies, setting paper sizes--15 different possibilities--printer margin and image controls, and macro settings. More about macros in a moment. There is a "Status Sheet" command that prints the complete printer configuration for the emulation mode currently selected. The status sheet is a useful reference chart for repeated use, showing all parameter settings and samples of all fonts available.

Level 2 contains the less frequent printer configuration options including emulation mode selection, setting serial/parallel interface parameters, allocating memory between serial/parallel channels, and between image working store and I/O buffering, and two built-in test patterns--horizontal and vertical lines.

The printer comes factory wired to a default set of configuration settings. You can always select "Factory Reset" if you wish to clear any changes you made.

However, if you wish settings different from the factory values, you can create a macro. It's very simple. In the Level 1 SelecType options is the command, "Save Macro," which saves the current configuration settings, to non-volatile RAM. You can have up to four macros, selected by the digits 1-4. There is another command to "Load Macro" that loads another printer configuration. You can "Delete Macro" and set the "Power-on Macro." The latter command sets the printer boot configuration defaults to those of your chosen macro. The macro feature is a wonderful facility for permitting five (four macros plus the factory setting) different printer configurations for different software jobs without the tedium of resetting parameters. I've already set my machine to boot in the FX mode rather than the factory default of the L-Jet2P mode."

With use, the complexity of option selection becomes straight forward and less intimidating, and the ease of use is greatly valued.

Using the EPL-78000 with the Atari ST

I have an Atari 1040ST, Release 1.0 TOS, a 30MB Supra hard disk, a Supra 64K MicroStuffer printer buffer, a 3.5" and 5.5" B-drive, modem, and lots of software--*WordPerfect*, *WordWriter*, *Mighty Mail*, *PageStream*, *VIP Pro*, *Superbase 2*, *IS-Talk*, *PrintMaster Plus*, *Word Quest2*, *UIS III*, lots of utilities, and programming tools, and special custom software. It all works with the EPL-7000.

With my wife, and a small paid office staff, I run the California Traditional Music Society, (CTMS), a non-profit educational corporation keeping folk music and dance alive in America. CTMS runs its total business on the ST--budgets, letters, newsletters, festival and concert programs, ad copy, mailing list, database of artists and donors, and a unique custom festival workshop manager and scheduler program. Our ST typically runs 10 hours per day. We needed a laser printer for some time, but cost and our custom software needs slowed our procurement.

After setup of the printer, I meticulously tried every program in my inventory. Some programs, like *WordPerfect* (WP), have lots of print drivers. WP had drivers for all three emulation modes, so I played with them all and set them as alternate printers. The WP "Printer Test Document" was very useful in testing the software-printer setup. Since Atari WP only does text, there is no difference in the output quality of the three emulation modes. Differences are in the control codes permitted by the emulated printer. For example, there is no option for landscape printing in the LQ or FX modes. There was no difference in printing time for different emulations.

The next big test was with *PageStream*, (PS). Years ago, when I first purchased the package, I made a font test sheet of different typefaces, point and pitch

sizes. I ran that test sheet against the various emulations and PS print quality choices--draft (1) to quality (7). Though the EPL-7000 has no draft mode, PS does. Also, the dot matrix emulation is certainly "draft" quality relative to the fine quality of the LaserJet IIP emulation. The LaserJet IIP emulation mode with PS level 7 quality gave the best results of any program in my inventory. I don't have the PostScript cartridge for comparison, but it will not add much in output quality to the perfect dark letters and smooth curves, even at 72 points, my largest test case. Of course, the higher quality had PS doing a lot of work and me waiting many (5-10) minutes for the data to transfer to the printer. (There's a data transfer LED on the printer control panel that flickers as the computer sends data.) That's more of a reflection on the Atari 8MHz 68000, and PS than the EPL-7000. The LQ and FX modes are faster for PS to generate the image. The EPL-7000 permits the user to specify the share of memory used for the I/O buffer and the image construction. This eliminates the frustration of insufficient memory for full page graphics as reported with the LaserJet III in the *Current Notes* 10/90 review of that printer.

All the other programs were run in FX mode, as they did not have (or my release did not support) the LaserJet IIP or LQ printer options. There were no sur-

prises. I still need to experiment with *VIP Pro* using the landscape option of the printer to obtain really wide spread sheets. In all cases, the speed of the printer was very exciting after years of waiting for the 9-pin to type out a quality PS graphic, or a multiple page double-strike quality report. Now it zips along at six pages per minute.

Conclusion

I've read much of the available literature on other high quality printers--the 24-pins, the Ink Jets, the HP line, other brands. I've read reviews in *Current Notes* on many of these choices. I find the EPL-7000 not only does a good job on its own merits, but it answers most of the objections raised by those reviewers. The printer is fast, flexible, inexpensive, easy to use, compatible with all ST software, and provides a growth path to upgraded capabilities. It can be used with the whole ST line, from 512K 520ST to the newer TT without the need to add memory to the ST. It is about twice the price of the high-end 24-pin and the Ink Jet printers for much finer quality output, comparable with the HP LaserJet IIP and clones, but with more options and growth, and it is less than half the price of the PostScript printers. I'm still looking for gripes. It's a wonderful printer. Buy one.

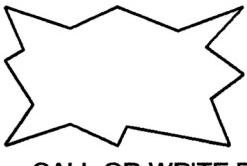
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For further information regarding the Pacific Northwest Atari Festival, call Terry Schreiber (604) 275-7944.

June 29-30:

Great Lakes Atari Computer Users Conference

The Great Lakes Atari Computer Users Conference will be held Saturday, June 29th, and Sunday, June 30th at the Mercyhurst College Campus Center in Erie, PA. It is within an easy drive of many other major cities, and Albany. Many of these cities have strong user groups supporting the Atari computers who will be participating in this event.

With 14 flights daily, USAir provides the primary air service into Erie International Airport and is the host airline for the conference. For conference attendees traveling by air, USAir is offering 35% off regular round trip coach airfares and an additional 5% savings on published discount fares. Call 1-800-334-8644 Ext. 7702 from Canada for reservations or additional information. Refer to Gold

File Number 13190000 and the Great Lakes Atari Computer Users Conference.

Mercyhurst College is located at 501 East 38th St. and is easily accessible from Exit 8 (PA Route 8 - Pine Ave./Parade St.) or Exit 7 (PA Route 97 - Glenwood Park Ave.) off I-90. Signs on the campus will direct you to the ample parking areas near the Campus Center.

Show times are 10am to 6pm on Saturday and 10am to 5pm on Sunday. Tickets are only \$3 at the door. Advance tickets are available through participating user groups and by mail at the discount price of \$2. Door prizes drawings will be held throughout the day. Seminars on technical topics and commercial products for the Atari computers will also be offered on a continuing basis.

To order tickets by mail, register as a seminar speaker or reserve exhibit space write to GLACUC, P. O. Box 10562, Erie, PA 16514 or call Patty Marshall (Vendor Contact) at 412-225-8637 or Dennis McGuire (User Group/Seminar Contact) at 814-833-4724.

July 20:

2nd Annual Blue Ridge Atari Fest

This event will take place at the Westgate Shopping Center in Asheville, NC. Computer STUDIO has made arrangements for show space at the shopping center, and Blue Ridge ACE will be providing tables and display space as needed by exhibitors at no charge.

Asheville is located in the heart of the Blue Ridge mountains, of the main vacation capitals in the east, and centrally located for easy accessibility for Atari users in most southeastern states. Last year's first show drew Atarians from user groups in North Carolina, South

Carolina, Georgia, and Tennessee to share ideas, socialize and meet with our main guest, Bob Brodie. This year's show will be larger in scope and we're anticipating a much larger turn out as well. For more information, contact Clifford Allen, c/o Computer Studio, Westgate Shopping Center, Asheville, NC 28806.

July 27:

AtariFest '91

For the third year, Mid-Indiana ST (M.I.S.T.) will be presenting the Indiana AtariFest. The purpose of this show will be to promote public and business awareness of the Atari line of personal computers and game machines. Because of the larger than expected turnout last year (over 300 attendees) the show has been moved to the Castleway Business Park Conference Center rooms 1 and 2. In addition the CADRE, Inc. Training Center (in the same building) will be available for presentations throughout the day. For more information, call Bill Loring, BLAST, 812-336-8103 (GENie: W.LORING1) or Dan Ward, ASCII 317-254-0031 (GENie: DWARD10).

October 12-13:

The WAACE Atarifest

AtariFest '91 is presented by the Washington Area Atari Computer Enthusiasts and will be held at the Sheraton-Reston Hotel, 11810 Sunrise Valley Dr, Reston VA 22091. User groups, seminars, vendors, software, hardware, swap room, desktop publishing, demonstrations, door prizes, midi games, telecom, education, entertainment, utilities, applications, IBM & Mac emulation, business, animation, art, graphics, developers, programmers, friends, bargains, fun, & lots more ...

For more information, contact Charles Smeton at (301) 465-8628, or on GENie mail as C.S.Smeton. For vendor information, contact John Barnes at (301) 652-0067, or on GENie mail as J.D.Barnes.

Curse Of the Azure Bonds

Award Winning AD&D Game Comes to Atari ST

A Review by Alfred C. Giovetti

The long awaited conversion of the award winning AD&D games of Strategic Simulations, Inc. to the Atari ST has arrived. *Curse of the Azure Bonds* is the only SSI "gold box game" or "Fantasy Role-Playing Epic" to be made available on the Atari ST format. *Curse* is set in the TSR, Inc.'s AD&D Forgotten Realms fantasy role-playing game setting. *Curse* concentrates on strategy and tactics for a small band of up to 6 player characters and up to two non-player character adventurers.

Passaround Plot

The story begins sometime after the events in the prior Forgotten Realms Fantasy Role Playing Epic, "*Pool of Radiance*." The game takes place in the area to the south west of Moonsea as it stretches from Phlan in the northwest to Tilverton in the southwest. The plot encompasses Shadowdale with Elminster and Lord Morngrim, just some of the most beloved characters of the Forgotten Realms lands. In addition to the many TSR books written on this area of Faerun, there are many AD&D official game adventures set in this area, including one on the *Curse* itself.

The plot of the adventure is the computer recreation of a book of the same name written by Kate Novak and Jeff Grubb and published by TSR, Inc. *Curse's* adventurers awaken in an inn in the city of Tilverton with azure-blue sigils magically imprinted just under the skin of each character's forearm. The bonds cannot be removed by any means and result in more proficiency in fighting. When the sigils glow, each character is possessed by the minds of those

who made the blue sigils. While possessed, the characters are forced to perform evil acts.

The characters are forced to search for the sigil's creators and destroy them to free themselves from the curse. *Curse* possesses unique monsters such as beholders, salamanders, manticores, rakshasa and marmoyles. Our heros must overcome the challenges of the Fire Knife Cult (one of the red wizards of They); the cult of Moander; the feud between the Zhentil Keep High Priest of Bane and Dexam, The Beholder; and finally the reincarnate body of Tyranthraxis in the depths of the ancient elven ruins of Myth Draynor.

Create a Real Character

You can use a group of pre-rolled characters provided with the game, transfer your characters from Hillsfar, or roll your own characters. You may choose from a list of six races: dwarves, elves, half-elves, gnomes, halflings and humans. You may choose gender of male or female for your characters. When the character is created, the computer determines six randomly generated ability scores of strength, intelligence, wisdom, dexterity, constitution, charisma and another randomly generated factor, hitpoints.

Newly generated characters enter *Curse* at the 5th level. *Curse's* characters can advance to a maximum level of 12 for thieves, 10 for clerics and 12 for all other classes. Your dungeon master is the computer and it will deal out even handed justice and high levels for all who earn them. You need not worry that a human dungeon master will decide that level 12 is too high and find your character biting the dust for good and starting over.

The Modify feature of the character generation routine should allow most people to transfer their characters from any game or computer format to *Curse*. "Modify character" allows you to change the character statistics, hitpoints and character name to generate custom characters. You simply use modify to recreate your characters statistics from other games and your transfer of a favorite character or party is complete.

You can pick from six character classes, including clerics, fighters, rangers, paladins, magic-users and thieves. Non-human characters can choose to be multi-class characters and have up to three professions to divide experience and hit point advancement among them. Multi-class characters are limited in advancement by race, strength and intelligence, except for thieves who have no limitations. Multi-class characters also split experience three ways so that 200,000 experience on a 3 class character is 66,666 per class.

Human characters can be dual-class characters who are one class for the first part of their lives and have changed into a new class for the remainder of their lives. Once his level in the new class exceeds his level in his old class he can use both classes and will gain hit points normally.

Interface Features

While exploring, the left hand side of the video screen is devoted to a heads-up display of your surroundings, which in some areas can be toggled to an auto-mapping display. The right hand portion of the display is used for maintaining character statistics of armor class and hit points, while the lower panel

is reserved for messages. As you walk down the dungeon corridors the walls that scroll by are of many colorful and varied media, lending atmosphere to the chase.

The monsters and other NPCs, when encountered, approach you in ever increasing sizes until they fill the dungeon window with their two-frame animated visage. Special characters and situations result in the whole top half of the screen being devoted to a computer art display which is, unfortunately, not animated. The graphics are basically 8-bit but they do appear in brighter colors and better definition on the 4096 color Atari STE system than on the IBM EGA or VGA monitor in 16 color mode.

The auto-mapping feature is virtually useless in most of the areas of the game. Many of the dungeon and wilderness areas disable it. But several areas can be auto-mapped after your group completes a few battles to "clear" a small local area of hostile monsters. If the game designers could figure a way to allow for a system of auto-mapping for the whole game, it would represent a significant addition to *Curse*.

The Clash of Combat

Curse's tactical combat has been refined to a fairly efficient and very popular system. When combat begins, the left side of the screen is devoted to a semi-three dimensional diagonal perspective of the battle. The characters can move in any of eight directions by using the keyboard numerical keypad, mouse or joystick. Combat is resolved on a turn basis depending on relative dexterity of the combatants. A turn is composed of phases of movement and attack. There is a delayed turn phase which accommodates the time it takes to cast spells or allows you to time your movement and attack.

The magic system for clerics and magic users is straight out of the AD&D rule books. Spells are

limited to only a dozen or so spell types per level. Spells are cast in combat, camp or both. Some spells, like magic missile and fireball, become more powerful, involve larger areas and last longer as levels increase. The faithfulness of the magic system to the AD&D rules is one of the big pluses for this game series.

Spells are limited to those of the 5th level due to the limitations of the character advancement levels. High level rangers and paladins can cast level one and two druidic and clerical spells respectively. In addition, the higher levels add to certain spells who use level as a multiplier of power, such as fireball and magic missile, range, radius, and duration.

Combat can be handled manually or in auto mode. Some battles can be handled from beginning to end in auto mode, while others require the direction of the back rank ranged weapons, such as archers and spell casters. Where clerics or powerful wizards are in the back ranks of the enemy, you hit the space bar to disable auto mode and use ranged weapons to keep these powerful characters from casting spells such as hold person and death strike.

Auto mode does sacrifice common sense strategy. Auto mode may cause characters to run behind a wall, run away from the enemy, or move erratically from the side. Autocombat mode should allow the characters with bows to use them while approaching the enemy to engage with melee weapons. The auto combat feature should be made more intelligent.

Combat has been streamlined. The action is quicker, and you will not have any five-hour battles as seen in *Pools*. Many battles are over in less than five minutes. The flight of arrows is abbreviated. With a few refinements the combat system could be a real joy. There are a lot of high level monsters in *Curse*. Characters die often and easily.

Save your game often.

Curse has mouse support. I personally prefer keyboard control of characters since I do not want arthritis in my first two fingers on the right hand. I like to use all my fingers. But those who enjoy mice say the interface speeds up the game and makes operations less tedious. Joystick is also supported for movement and may even be superior to the mouse for some.

Sounds of Curse

Several external IBM sound boards are supported, including the Roland MT-32, the Ad-Lib and the CMS Game Blaster. The Atari version of the game supports stereo sound capabilities of the STE. The STE sound and music score is far better than that heard on the IBM systems. Unfortunately, the ST version of *Curse* does not fully utilize the full sound capability of the STE.

I, for one, find the story in the game to be the best part of the game other than the combat game system, so I would like to see more paragraphs in future games rather than less. The best part of the game is reading and living the story which I like to feel is just like being there. Secrets has the feel of being there more than any game since Pools.

Conclusions

If you liked the *Pool of Radiance*, *Secret of the Silver Blades* or *Champions of Krynn*, you will like *Curse*. The story is detailed and interesting and carries you right along. I finished the game after about 20 to 30 hours of play time. The game turns off after entering the last room containing Tyranthraxis so do not enter the last room until you have finished exploring. If you like the best AD&D combat simulator available that comes with a great story, buy this one at \$59.95. It is a steal.

Strategic Simulations, Inc., and Electronic Arts, 1810 Gateway Dr., San Mateo, CA ; (414)571-7171.

Current Notes
ST Library
New Disks for
June

#560D: OTHERWUZ.

(C) Wuzzlers is a hangman game with a twist: a picture hint is displayed with each wrong answer, thus increasing the chances for success. This file contains WUZZLERS.PRG and a WUZZLERS.DAT file with nearly 50 picture/word puzzles for the game. The PRG file is the same as that found on CN library disk #542, but the pictures on this disk were designed by German computer artist Juergen Reichenwallner. (The words to be guessed, of course, are in English!) Words appropriate for 2nd grade through adult. Note: this program requires a DS drive; will not run from a hard disk.

#561D/562D. THE BIBLE SERIES NEW TESTAMENT.

These two disks contain 28 ARC files totaling 1,311 files. The original disks where the ARC files are on, were formatted to 830K Twister format. After these files are unarced they will take up 8 SS/DD Disks. This program took seven years to develop and is Irving Risch's gift to the Atari Community. It will run ok on a floppy system, but a hard drive is recommended.

#563D: GAME DEMOS.

BUGST--This is a one level playable demo of *Bug Bash* by Big Shot Software. You must clear the level of all trash. Collect trash by pulling down on the joystick and pressing fire. Only one piece of trash can be carried at a time. Fly over the trash can to drop trash. Use your insecticide gun to kill enemies and watch out for the end of level guardian!

CAPTIVE--Playable demo of *Captive*, an excellent futuristic game with the Dungeon Master mouse-view type gameplay. An excellent game if you enjoy this type of adventuring.

MSTDRIVE--This is a two-level playable demo of *Jupiter's MasterDrive* by UBI SOFT. First, select a one or two player game. When the light turns green, accelerate by pressing fire. You can shoot the opposition by pushing up on the joystick. It is a three-lap race in all. On the second level, collect the ten bonuses before your competitor. Use the radar at the base of the screen to plan your journey.

POND--This is a one mission playable demo of *James Pond* by Millennium. You must gather eight gold bars from the wreck of a large, sunken ship, and take each bar to

the waiting row boat somewhere on the surface of the sea. Be careful though, as the shipwreck is lodged in a deep, dark underwater cavern with many monsters and meanies out to get you. Excellent graphics and gameplay!

#564D: TEXT EDITORS.

2BSFKEYS--2-Bit F-Keys V0.92, allows you to assign a text string to your function keys. You can assign F1 through F10. You can also assign Shift-F1 through Shift-F10. After running the program & assigning your text to the function keys you can then run other programs (e.g. text editor, word processor) and press a function key to print often used text (e.g. name, address).

ELVISED, GNOME, and MGEMACS--These are three UNIX-style text editors for the ST. These editors were discussed in the June/July 1991 issue of START. Includes documentation.

MINITX22--This is the "mini" version of the TX2 File Viewer version 1.42. It has most of the new features added since 1.35, including graphics, yet it is only about 4K larger than the old mini version. NOT a demo. This also fixes a bug in the monochrome display of large graphics.

STEXT14F--This is a new version of SText. Version 1.4e had a bug where it would not save a block properly. SText is a fast file reader that has block print and save, print to page to page, powerful status line, and supports the STReport Index format. Many other powerful features. Shareware.

TALKER--Talker is a talking text file reading program. The speed and pitch are adjustable. Version 1.1.

TX2CNVT4--This is the latest version of the TX2 Converter. It has been updated to support GEnie Lamp PR magazine and AUA Newsbriefs. Also, Z*Net and STReport formatting has been improved; most known bugs were removed.

#565D: DESKTOP UTILITIES.

GOGOST4I--GoGo-ST is a replacement for the Desktop. It allows very quick access to all your programs and files. For example, to load a file called TEXTDOC into your Word Writer wordprocessor, just click once on a TEXTDOC! When done, click once on LDW for a spread sheet session, then back to another wordprocessor session, all without seeing the Atari Desktop. This is a fully functioning version with a request for a shareware contribution.

BOOTMSTR--BootMaster is an AUTO folder program that allows the user to configure the programs and data files to be used when the system boots. The program allows disabling and enabling of auto folder programs and desk accessories, in addition to providing access to renaming files so that multiple ASSIGNSYS files or other data files can be chosen instantly, on bootup! BootMaster can be configured to load each

time you boot your ST, or only when you depress the ALT key. The program is small and easy to use.

MAX30DEM--This is the demo version of MaxiFile 3.0, the Supertool from CodeHead Software. MaxiFile 3.0 takes the concept of file management several steps beyond any previous ST program, with an awesome text viewer, a graphic/numeric display of disk space, an unparalleled file/folder search function, dual directory display (w/ simultaneous window scrolling), full keyboard control of everything, true MS-DOS disk formatting, and much more!

MENUPLUS--Menu Plus is a complete desktop enhancement that will allow you to quickly launch (run) up to 160+ programs on your hard disk or floppy disk. New "tree" style menu system allows you to set up Main Menus and Sub-Menus. Features: set up over 160 different menu selections, view Degas, Spectrum and Neochrome files, show and print text files (show text uses the left and right mouse button for scrolling), edit and play ST-Replay sound files, set time and date, system colors and blitter, password feature. Also included is the Menu Mate accessory. Menu Mate will allow you to view Degas, Spectrum, Neochrome files, show/print text files.

ZEST--Here is a little demo program that simulates the look of the NeXT desktop in GFA. Source code included. The demo includes a calendar, database (address book), typewriter and paint program. Use the ZeST interface for your own GFA program! Requires a mono monitor.

#566: CAPITAL FUN!

Ver 1.00, (C) 1991 Enque Software, is designed to teach and reinforce fundamental capitalization rules. Capital fun was created for second to sixth graders, and tested extensively with the aid of the Lone Jack third grade in Lone Jack, Missouri. Although designed for class use, Capital Fun is just as effective in the home. In the learn section each concept is presented as a rule and modeled for the student. The student then has opportunities for both guided and independent practice to ensure comprehension of the concept. Finally, in the apply section, students must remember and use all concepts learned within the context of a paragraph.

#567: UTILITIES.

ACCI3--Accessory V1.3, by Murray Levine, is a program that will let you load all of your accessories out of a folder called ACCS on the boot drive instead of loading them out of the root directory of the boot drive. This helps to keep your main directory less cluttered especially for hard drive owners.

ARCSH25--ARC Shell 2.5, the program that adds a friendly and powerful GEM interface to ARCTTP and LHARC. Now featuring: an expanded link with CodeHead Software's new MaxiFile III! ARC Shell 2.5 takes advantage of a "back door" built into

MaxiFile III, letting you select multiple files for archiving--even files from different directories--with one move! Choose everything you'd like to arc, and walk away from the computer while it does the work for you--no more waiting to select the next file! (Requires MaxiFile 3.0 or later.) Version 2.5 also fixes a bug in 'Extract w/Query' which prevented all files in an archive from being listed. Shareware! Copyright 1991 Charles F Johnson & LGF Software.

AUTOARC--100% functional shareware program for the automatic archiving of files. AutoArc uses your archive program to create daily, weekly, monthly, or custom archive files of selected file types. You can configure it to archive files after they reach any age. Also will delete arced files after they reach a specified age to keep your disk clean. Can be set to ignore files which have already been arced. Run as autoboot or manually. Includes a separate GEM based configuration program to set up multiple archive/delete schedules.

DCBOOTIT--DC Boot It v1.0, (c) 1991 Double Click Software. Freeware program. DC Boot It allows you to run a 'BOOT DISK' from the desktop. Simply run DC Boot It, pop in a 'BOOT DISK' (like a game disk) and BOOT IT! This has the real advantage for accelerated computers, since you can set the machine speed before booting. You can also go to 50 Hz mode before booting the floppy disk.

DCLEFTY--V1.0, Freeware from Double Click Software. DC LEFTY is for the left-handed Atari users. DC LEFTY swaps the LEFT and RIGHT mouse buttons. So now when you press on the right mouse button, it thinks it is a left mouse button, and vice-versa.

DCPOPBAR--V1.0, (c) 1991 Freeware from Double Click Software. DC PopBar gives the GEM desktop a 'popup' menu of the menubar entries. Now all menu entries are available in a popup menu wherever the mouse is.

DC_RT_DC--With DC Right DC installed, a quick right mouse button click will emulate a left double click. 100% assembly. ST, STe and TT compatible.

DCTOPPER--DC Topper will automagically top the window under the mouse. Best at the desktop, but can be turned on in programs. 100% assembly. ST, STe and TT compatible.

FLRMT3_5--Embedded custom formatter, direct FDC formatting (change all 5 sector gaps, select sector size of 128,256,512,1024 bytes, skew formatting with a user selectable factor from 1 to 18 sectors and more!) Embedded virus utility: Intelligent virus checking (less falsing on boot disks) automatic virus templating and matching, graphic virus representation (DNA footprinting of virus), user expandable known virus library, virus kill/immune. All this plus an expanded floormat main module

with new multi drive/disk formatting, disk volume labelling, and the old functions (IBM formatting, undo accidental formats, change cluster/directory/fat size, space age interface). **FUNKALERT**--Funk Alert! Shareware by Charles F "Godfather of Soul" Johnson, (c) 1991 Little Green Footballs Software, V1.0. This is a tiny program (it uses less than 1K when installed!) that assigns the buttons in GEM alert boxes to the function keys F1, F2, and F3! This means that any program that calls the GEM AES form-alert() routine (i.e. almost every GEM program) now has built-in, easy to remember "hot key" equivalents for its alert box buttons!

LZH11318--Latest version of LHARC, version 1.1318. Complete with documentation in German and English.

MKRMDIR--ACC that will let you make or remove folders (dirs) within other programs that allow you to access the DESK menu. Good for those programs that do not have this option built in.

MULTI135--MultiArc 1.35, an archive shell with a difference. Extract multiple archives into separate folders with a single click from the desktop. Compatible with NeoDesk 3. Much more efficient for viewing and extracting from archives than traditional archive shells. Version 1.35 adds archive program configurability--you can change the command prefixes passed to the archive program. This allows the program to be used with just about every archiver out there; lots of neat features.

SQUEESIM--Squeezes the last drops of disk space out of IMG files and won't hurt them a bit. Has the ability to auto-delete those semi-useless "sister" .GEM files TU creates. Squeezes 2% to 60% of extra space out of any IMG. This version preserves the time/date stamp of the IMG files.

ULTRA--This program will "ARC" complete disks into a single file. Great for those demo disks with "Hidden" directories that can't be accessed or copied by TOS. Works great! Note: needs two drives.)

#568D: DYNACADD DEMO, V1.84.

Two ARC files on this disk include part 1 and part 2 of a two-part DEMO version of DynaCADD that replaces the earlier DEMO. This version contains both the Makeplot Program and The Font Editor as well as a complete save-disabled version of DynaCADD. Note: This is not the TT version although it will run on a TT Mono only! One meg or more!! (Replaces CN #460D)

#569: AIR WARRIOR V2.0e

Air combat simulator for multi-player battles on GEnie or individually in practice mode. (Note: this disk replaces CN #520, V2.0b.) Improvements since version 2.0b include: The plane weight equation is now correct when the ammo is loaded on-line. A funny looking debug that was left in the radar code has been removed. A terrain database prob-

lem which caused the rivers to appear in the wrong place with respect to the mountains has been corrected. The pipper setting is now preserved between flights. (but not in config file). The tracers-with-no-bullets bug has been fixed. Gunnery has been modified to send additional data to the host to allow more sophisticated hit/damage calculations. Trucks have been added for your driving pleasure. The new terrain contains hills that can be driven over or landed on. A new command F10 has been added to film playback which will display the elapsed time since the beginning of the film. The Host can now apply initial damage (or lower the fuel octane) to a plane. Note: This version of Air Warrior has undergone very stringent testing between the different computers (Macintosh, Atari ST, Amiga, and IBM PC) to ensure that the flight performance of the different planes is the same.

New Disks Introduced in May

#555D: Utility No. 49: ABFormat; Calendar Desk Accessroy V4.7 and CALSH47A; HotWire's screen saver and mouse accelerator; IMG2ICN, convert .IMG files to Degas Elite; IMGVIEWR, view .IMG files in 4-windows; MCF desk acc shows directory structure; ST-TOOLS, PC Tools look-a-like; TN-PCALC v1.2 a windowed printing/programmers calculator; TLC-ATTR displays ALL files and allows changing attributes; TLC-FIXR, simple changing of text strings in programs; TLCFORM2, formats in a fast 9 sector or in a standard 10 sector format. TLC-NAMR, allows use of ALL the ST's characters in filename; TLC-PLAY, loads and manipulates ALL digitized sound file formats. TLC-SHOW, quick and dirty Spectrum viewer; X-MON, replacement driver for Moniterm monitor.

#556D: Calamus No. 4. Glip fonts. ACURANSX, an Acuransx created in Outline ART. THEGUNTH, 2nd place winner and Jitney, 1st place winner in Outline ART contest. MYCALNDR, calendar. PST FONTS.

#557D: Hero! Demo. graphic adv game.

#558D: ST Games: Amaze, (c/m). Dark Castle (c). Daniel's Dungeon! (c/m). Reaction (c). Super Mastermind.

#559D: Financial Utilities. FGRAPH demo produces many types of common business and scientific graphs. APRCALC, professional, commercial-quality desktop calculator. BIGBUX13, helps you manage your money. CHECK-BK and Chekbook v1.19.

Disks are \$4.00 each (10 for \$35.) plus \$1 S&H/4 disks. Order from: CN Library, 122 N. Johnson Rd., Sterling, VA 22170. VISA/MC orders accepted (703) 450-4761.

Current Notes

PD/Shareware Cartridge No. 1

(c) 1990, Current Notes, Inc.

112 Disks
#347 - #459
(July '89 to June '90)

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 374 Lil Green Sel V1.4
 374 Pin Head V1.4
 374 DIRsleft
 374 Multidesk V1.1
 374 HotWire Demo
 374 MIDI Max! V1.0
 375 MegaBlit V2.8 (M)
 375 Quick INF V1.3
 375 MegaWatt Acc
 375 Quick Find V1.5
 375 Quick Index V1.5
 375 MegaBoot V1.1
 375 Quick Label V1.0
 375 Quick ST V1.45
 375 Quick Print V1.0
 375 Quick View V1.4
 376 NeoDesk Icons
 376 NeoDesk Demo
 377 Atari HD Util V3.01
 379 DCOPY V3.2A
 379 DCOPY Shell V1.2
 379 Diskvfy
 379 Floormatter
 379 GEMlabel V3
 379 Pack V2
 385 DC Xtract Acc
 385 DC Clock V3.3
 385 DC Formatter V3.02
 385 DC Deskey V1.0
 385 DC Stuffer V0.9
 385 Mystic Formatter
 403 Cheetah V1.0
 403 Redirect
 403 Pack
 403 Pin Head V1.2
 403 Speed Reader!
 403 Address Database
 403 Disk Chart
 403 File Finder V1.2
 405 HP DeskJet Utilities
 406 Assassin

- 412 ARCTTP
 412 ARCXTTP
 412 ARC521FX.TTP
 413 Check V1.1A
 413 Cheetah V2.0
 413 Diary Acc V1.7
 413 Recover Trash V1.1
 414 DC Showit V1.0
 414 Lil Green Sel V1.6b
 414 Super Boot V6.0
 414 Quick Print V1.0
 414 Star Struck V1.3
 414 Switch 630
 423 Picswitch V7.0
 423 SPX Slide Show
 423 B-GIF Converter
 423 Conv to .IMG 0.90
 423 Convert PM V1.5
 423 Ideal IMG Size Acc
 423 Convert PM to PI3
 423 Print IMG Acc
 423 Degas-Pic Acc
 423 Degas-to-McPaint
 423 IFF Converter V3.1
 423 Convert Spec->Degas
 423 Multiple IMG Setter
 433 Diction Spell Check
 433 Disk Label Printing
 433 Form Fill V2.0
 433 Fl St Screen Fonts
 433 GrafX Display V0.9
 433 Paperless Accountant
 434 Convert to .IMG
 434 Degas Elite Pixel
 434 Swticher Acc
 434 Invert Degas
 434 ElectroCop GIF Pics
 434 ViewGIF V0.8
 434 Alslide V2.1
 435 Flu V1.30
 435 Biorythm Acc
 435 Text-Dump V2.0
 435 UC's Disk Lib V1.5
 435 UC's Clock Acc V3
 435 UC's RAM Acc V1
 435 UC's MIDI Strobe
 439 2acypry/2accprg
 439 NeoDesk Canvas

Word Processing

- 372 MagniWriter
 401 ST Writer V3.4
 415 Hardware Mods No. 1
 425 DMC Laserbrain
 427 Hardware Mods No.2
 430 ST Writer Elite V3.8
 448 Kepco Edit
 451 Stevie V3.95

The programs listed above are available on CN cartridge #1. Programs are listed by category. Within category, programs are listed by CN disk numbers. The three-digit number indicates the CN library disk on which the program can be found. Note: an (M) indicates monochrome only.

CN cartridges are available for \$119.95 plus \$4 shipping and handling. Individual disks are available for \$4 each (10 for \$35) plus \$1 S&H for every 4 disks.

Order disks from:

CN Library, 122 N. Johnson Rd, Sterling, VA 22170. (703) 450-4761

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Current Notes

PD/Shareware Cartridge No. 3

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Adventure Games

- 494 Taipan II (C)
 507 Text Adv Dev Sys
 507 Ditch Day Drifter
 508 Deep Space Drifter
 513 Disenchanted

Desktop Publishing

- 461 Calamus Outline Art Demo
 469 PageStream Font Editor
 470 Clip Art #14-People
 471 Clip Art #15-People
 521 Clip Art #16-Old Cars
 522 Clip Art #17-Cartoons
 523 Clip Art #18-Misc Themes
 524 Clip Art #19-High Res Pictures
 538 Calamus Fonts (Advertise, Architect, Barnum, Broadway Engraved, Causal Loose, Celtic Roman, Flash Book, Fancy Chancery, Harloe, Kleranden Heavy, Mouse, SchoolBook, St. Francis, Suizo, Tiphany, Univ Bold, Univ Roman, Wild West, Windzor)

- 552 Calamus Fonts (Lucifer, Tiempo, HORSE CAPS, LEE CAPS, MEDICI, ZALESKI CAPS) plus GEnie messages.

Database

- 545 Cardfile DV1.43
 545 Notes V0.9
 548 First Base V2.0
 554 Informer II D.
 554 R-Base D.
 554 TLC Address Book

Demos

- 460 DynaCadd D.
 464 Personal Finance Manager Demo
 465 Mail Pro Demo
 526 eSTeem PILOT D.
 541 God's Word'2 D.

Education

- 477 Class V2.05
 477 EZ-Grade D.
 485 Algebra 1: Linear Equations
 486 Algebra 1: Verbal Problems
 487 Basic Math Skills: Operations
 488 Grades, Interims, Student Teams
 495 TestMaster V2.01
 516 Stargate V3.0 (M)
 530 Cinema
 530 Flash Card

Games

- 462 Bloodwyche D.(C)
 463 Blood Money Demo
 463 Wipeout D.
 465 Stocks and Bonds (M)
 478 SpaceWars V1.0
 479 Hero IID D.
 479 Swiftar D.(C)
 499 Starblade D.(C)
 500 Yolanda D.(C)
 500 Rick Dangerous D.(C)
 501 Photon Storm D.(C)
 501 Aquanaut D.(C)
 502 Kid Gloves D.(C)
 502 Back to the Future Demo (C)
 512 Sorry (C)
 512 ST Square (C)
 514 Pileup V3.0 (C)
 525 Gran Prix (C)
 532 Maniac Miner (C)
 532 Valgus
 533 Collapse V1.1 (C)
 533 Jeopardy (C)
 533 Valgus'2 (C)
 533 Triple Yahtzee (C)
 534 HacMan II (C)
 539 Toyota Rally D.(C)
 539 Flimbo's Quest D.(C)
 539 Defender II D.(C)
 540 Simulcra D.(C)
 540 Spellbound D.(C)
 540 9 Lives D.(C)
 543 Midi Maze II
 550 STrabble
 550 Nova

Graphics

- 482 Wallace #1 (C)
 483 Wallace #2 (C)
 484 Wallace #3 (C)
 491 Wild Flowers (C)
 497 Public Painter V0.1 (M)
 518 Union Demo (C)

Kid Games

- 476 Me First! V2.0 (C)
 504 KV-Match (C)
 504 Letter Hunt (C)
 504 Ench. Forest (C)
 504 KV-Geog-1 (C)
 505 SDI Adventure (C)
 505 Mansion Adventure (C)
 505 Mountain Adventure (C)
 535 KidMixup Plus (C)
 536 Rabbit (C)
 536 Santa Clause (C)
 536 Burger (C)
 536 Circus (C)
 536 Robin (C)
 537 Perfect Match (C)
 537 Makin' Aiken (C)
 537 KV-Fonic (C)
 542 Wuzzlers (C)
 542 Rebus Writer
 547 Barnimals (C)
 547 The Wolf and Seven Kids (C)

Music/MIDI

- 466 16-Voice Sequencer
 467 MIDI Music Maker
 496 Guitarist D.
 498 Equinox Sound-Tracker V2.5
 511 MIDI Mike V1.0
 511 Music Studio Song Player V1.2
 511 MS Player
 527 Alchimie Jr. Music Sequencer
 527 Name That Tune
 528 Name That Tune Misc Songs
 529 Name That Tune TV Songs
 544 Personal Music Librarian
 545 Musicalc V2.02
 546 TCB Tracker Demo

Office

- 464 Payroll V3.0 Demo
 464 Cost of Living Ad-juster
 464 Checkbook V1.14
 493 B/STAT Ver. 2.36

Reference

- 480 Current Notes Catalog
 481 CN Macintosh Collection
 489 Area Code Locator
 489 Postal
 509 GEnie Files 9/90
 515 Starting Block Columns

Telecommunications

- 506 Mouse-db V3.0
 506 Spirit Editor
 506 A1-Time
 506 Clock-5
 506 Mouse Accel. V3
 506 Ocultarx
 506 Idle-22
 506 UnLZH V1.72
 506 Volume
 506 ST Sentry V5.1
 519 Printer Utilities
 531 Quick ST 2.2 D.
 531 Little Green Selector V1.88
 531 Gram Slam Grammar Checker D.
 548 Backup ST
 548 K-Text V1.33
 548 SText V1.1
 548 PFXPAC
 548 Library Master
 548 TX2-View V1.35 D.

- 548 Pinhead V1.8
 548 Bigcolor V1.05
 548 SANDP V2.1
 549 Arc to LHARC Switcher

- 549 Arc Shell V2.3
 549 UNLZH V1.61

- 549 ARC V6.02
 549 LHA V1.21

- 549 Arcgsh V3.5
 549 Unerase

- 551 SuperBoot V7.0
 551 Autosort

- 551 Digiedit
 551 Picswitch

- 551 SnapIt
 551 MassKill

- 551 FormDolt

9.5 Disks

460 - # 554

(July '90 to April '91)

44 MB--\$19.95

Note: A (C) indicates color monitor, (M) monochrome monitor, and "D." a demonstration version. These disks are all available on a single 44 megabyte Syquest removable cartridge (\$119.95 plus \$4 S&H). Disks can also be ordered individually for \$4.00 each (10 for \$35) plus \$1 S&H for every 4 disks. Order from Current Notes Library, 122 N. Johnson Rd, Sterling, VA 22170. (703) 450-4761. VISA and MC orders accepted.

The Unknown Computer

by Rick Keene

There has been so much printed lately about how great things are going to be with Atari and its line of computers. Newer more powerful models, better and more expensive software imported from Europe (where they know a great computer when they see one), dealers' shelves filled, better support, higher visibility in the general computer field, the list goes on. I think it's still a wish list, however.

Face it, unless you own an Atari, you wouldn't be reading this magazine right now. All this great news we've been reading about, all these new and great graphic and desktop publishing software and updates to existing software; we've all read about them. We've all read it but how are the people who may need an alternative computer to Macs and IBMs going to find out? In *Byte?* Publish? *Compute?* *How?*

None of the above. What? Oh, I'm not asking how, I mean "How." It's the title of a monthly, glossy, buy it at every bookstore's magazine rack, seven dollar magazine. (Okay, that was a stretch, but bear with me please.) It's a magazine about "ideas and techniques in graphic design." It says so under the title on the cover. If you're a graphic artist, designer or illustrator, you may already be familiar with the magazine. If you're a graphic artist and can part with \$7 a month for a magazine, get in touch with me and let's go over client lists together.

Having been excited about the CEP show and the attention Atari received, I thought it might be a good idea for me to get in touch with *How* and ask if they'd be interested in what "other" graphic artists are doing with "other" computers. Occasionally, they have articles about computers and the artists who use them. So after much prompting by some people I trust, I thought that maybe, um, well, they might be interested with, er, what I do with it.

Since I have to be my own PR man I sent them some samples. The usual stuff I did for DC comics, the interview with me that was published in the March *ST Informer*, and some copies of some Atari magazine articles about the ST/Mega STe/TT computers and the showing at CEPs. You (I know I don't) can have a bit of brain power, a dash of talent, money, power, any or all of that stuff, but if your timing is off, none of that will do you much good. It seems they already "covered" computers for their next issue and they weren't interested. I guess if it's not Mac or IBM, it's not worth covering. That's how I felt when I received the letter from F&W (see box).

After thinking about it some more, however, I feel that this is a positive letter. I feel that the door may still be open if they hear more about Atari's computers. She states it right

F&W Publications, Inc.,

1507 Dana Ave, Cincinnati, OH 45207

April 30, 1991

Dear Rick:

Thanks very much for submitting the enclosed as a possible article idea for our magazine. Unfortunately, we don't see a good "fit" for this material in our editorial calendar right now. We are just winding up a special issue focusing on computers and computer graphics, and it will likely be several months before we deal extensively with the topic again.

Please let us know if you have any particularly exciting projects in the works in the future. We don't receive information from Atari about its graphics systems, and I was intrigued to hear they were in the market.

Again, thanks for your interest in *HOW*.

Regards,
Bryn M. Mooth
Assistant Editor

there at the end of the letter: "We don't receive information from Atari... and I was intrigued to hear they were in the market."

Seems to me that if magazines don't even know you're in the market, they can't write about you. Who's fault is that? If big bucks advertising is out, then why can't Atari at least send out information about their systems to magazines like this? How expensive can that be? When I finally talked to Bryn on the phone she said that she honestly didn't know Atari made such powerful computers (surprise), and I didn't hear one snicker from her. She was interested. Maybe not exactly with what I was doing with the computer at the time, but she was interested. And I have to believe that if and when I do more with the computer, she'll be interested.

So this is what I think. If *How* magazine reads enough letters from inquiring Atari users as to why the Atari was overlooked, the magazine may give it a shot and write something about it. They may even go looking for information about it. I still believe in letter campaigns. The address is at the end of her letter in case you missed it. Software developers, send some information about the latest and greatest software. Artists, desktop publishers, doodlers, fire up that word processor and drop Bryn a note on why you think the Atari is great at graphics. You don't do graphics on your computer? Send her a letter about the computer in general. Send her news clippings about the machine and the software that we read in our diminishing Atari magazines. If not, then we Atari users, and there are fewer and fewer daily, will be the only ones reading about this stuff in our own magazines, at least while they last.

Tune in next month. The battle continues.



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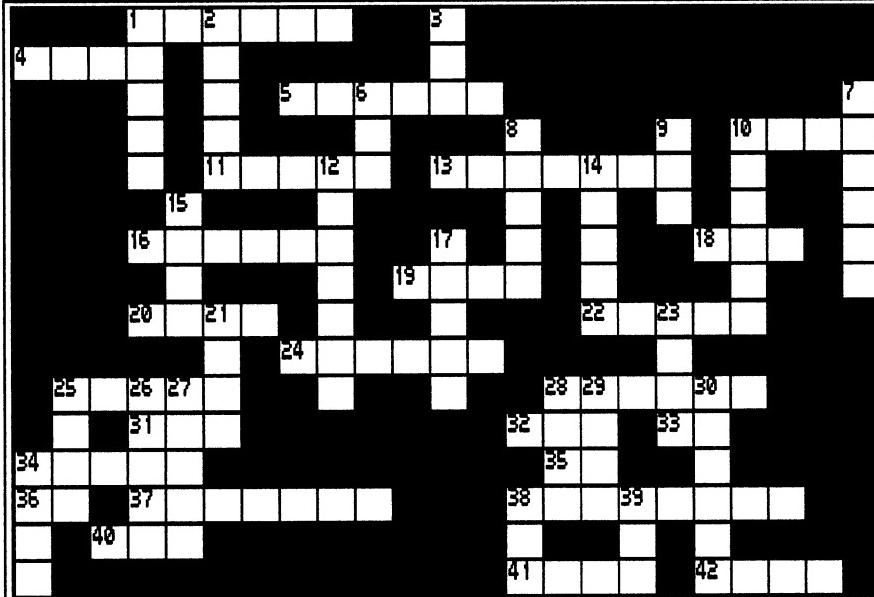
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- 1. by no means
- 3. not ____
- 7. northernmost
- 12. path
- 15. joint
- 25. leftovers
- 26. emblem
- 28. caboose
- 30. reputation
- 34. white headed
- 38. go juice
- 39. craft

ACROSS

- 4. border
- 16. a thousand thousand (2 words)
- 20. audio

- 24. should do this
- 25. harden
- 28. log
- 31. gnawed
- 33. us

- 35. similarly
- 36. near
- 40. affirmation
- 41. sailor
- 42. nym

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